

THE
ANALYTICAL REVIEW,

For NOVEMBER, 1790.

ART. I. *Letters on Education: with Observations on Religious and Metaphysical Subjects.* By Catharine Macaulay Graham. 8vo. 507 pages. Price 6s. in boards. Dilly. 1790.

THIS masculine and fervid writer has turned the very superior powers of her mind to the consideration of a subject, which, perhaps, embraces a wider circle of unsettled opinions, than most of those disputed points that have exercised the argumentative talents of ancient philosophers and modern theologians.

'Of all the arts of life,' Mrs. M. observes, 'that of giving useful instruction to the human mind, and of rendering it the master of its affections, is the most important:—and, she adds, 'Every work published on education, that affords one new idea which may be found useful in practice, is worthy the attention of the public. Nor does the author of these letters aspire to any other merit, than that of offering a few new hints on the subject, and throwing some illustration on those which have been already given. If the novelty of these should be made an objection to the work, let it be remembered, that every thing new is alarming to the ignorant and the prejudiced; and that morals taught on immutable principles, must carry a very different appearance from those founded on the discordant sentiments of selfish man.'

Perfectly coinciding in opinion with this sagacious writer, not only respecting the importance of the subject, considered in an un-circumscribed view; but also with the tendency of her instruction, which she has intimated in the preface, by asserting that morals must be taught on immutable principles, we shall proceed to analyze a work that displays a store of knowledge, arranged by a sound understanding.

The Introductory Letter, though at the first glance it may appear desultory, contains many observations strictly connected with the main subject:—The author particularly dwells on the arguments which may be produced in favour of the future existence of brutes; and treating a moral objection to the goodness of God, involved in tenfold darkness, she agrees

with Dr. Jortin, who has cursorily dipped into this mysterious subject, in his sermon on the Goodness of God.

‘ The uniform voice of revelation,’ says Mrs. M. ‘ everywhere proclaims God the universal parent of the creation. By this appellation, Hortensia, I would describe a relation more tender than what we commonly annex to our ideas of the author of nature. Almost every sect of Christians, in order to spur on the lazy virtue of their votaries, have represented the rigorous justice of God, in a light which confines his benevolence to a narrow sphere of action ; and whilst he is represented as devoting to an eternity of torments the far greater number of the human race, the gates of Paradise are barred to all but the elect. Tremendous thought ! It is thus indeed that the gift of eternal life is a dangerous pre-eminence, and the balance becomes more than equal between us and the brute creation.

‘ These are the melancholy visions of, perhaps, the greater part of the religious world, whilst to the eye of the modern philosopher, God is infinite only in his natural attributes ; and because they cannot find a more satisfactory reason for the introduction of moral and natural evil, they limit the power and the benevolence of God, to a size which exactly squares with all the objects of sense. The philosopher contemplates the monster Nature, who is continually devouring and regorging itself, with rapture and delight. He views with a complacent sentiment, myriads of beings brought forth to animated and feeling life, merely to serve for the support of creatures, who in their turn must pay to the stern law of Nature, a tribute equally painful.’

The question of public and private education is next considered. This is one of the disputed points, which affords continual fuel for controversial writers, though many of them, seeing the subject in different lights, do not dispute on fair ground. Before the discussion of this question, it is necessary to ask parents a few previous ones. What object have you principally in view, when you deliberate whether you shall give your son a public or private education ? Do you wish to render him, supposing him to be a boy with a quick comprehension and a daring spirit, a man of shrewd abilities, calculated to rise in the world ? Do you wish him to mix with his superiors, and form early connections, that may possibly be useful to him in life ? Do you wish him soon to become acquainted with the vices and weaknesses of human nature, and learn adroitly to turn them to his own advantage—send him to a public school. But, if you are more anxious to fix just principles in his mind, on a grand scale, than to see him dazzle by the brilliancy of his acquirements : if you wish him to have a sound mind in a sound body ; and have sufficient resolution not to make a *little* gentleman of him ; or allow the visitors and servants to vitiate his mind by false respect and flattery : if by example you can teach him to respect himself, on account of intrinsic worth ; and are so situated as to be able to let him feel the comfort flowing from the exercise of

of domestic affections and duties—in the name of God keep him at home. For, to use the words of our author, ‘A public education may be formed on the very best plan; and yet, in many points, it may fall short of what may be effected by domestic instruction. The one cannot, in the nature of things, be so elaborate as the other: besides, what tutorage can equal that which proceeds from the attentive zeal of an enlightened parent? what affection less warm and intense will prescribe and follow such rules of self-denial, as is necessary to preserve the pupil from receiving any impression which may be mischievous to his future innocence and peace?’

We cannot agree with Mrs. M. that it is easy for people of fortune to place their children under the care of governors and governesses in whose sobriety, discretion, and wisdom, they can put a full confidence; on the contrary, it is, perhaps, the most difficult of all tasks to procure, even when the expence is not considered, a person in whose discretion and abilities a discerning parent could rely without great anxiety.

Some judicious remarks occur in the two following letters respecting the management of both mind and body during infancy—and particular stress is judiciously laid on the necessity of acquiring hardy habits. Mrs. M. directs that the amusements and instruction of boys and girls should be the same.—*The subject of amusements and innocent employments pursued.* The great advantage of inducing habits of independence is forcibly represented. *Happiness more likely to be found in the gentler satisfactions than in the higher enjoyments—filling the imagination of young people with prospects of enjoyment, improper.* The following remark appears just. p. 81.

‘In the mind of man, Hortensia, we may observe propensities which are of such opposite qualities that the inattentive observer would be apt to accuse nature of caprice, in departing from simplicity, in order to produce confusion. But how far different are the conclusions of the philosopher! He acknowledges the necessity for every seeming contrariety. He perceives, that if the force and power which habit acquires over the mind were less strong, virtue would be cultivated without success, and education be of no avail. He allows that there is wisdom in limiting the empire of habit, by the appetites of curiosity, and the love of novelty. And he discovers that nature, in sowing the seeds of such discordant passions, and planting in the human mind such opposite inclinations, left it to the care of experience to perfect her work by cultivation, and by fixing the degrees of either as best suits the great end and purpose of education.’

On the vice of lying—religion.—The Bible and New Testament totally excluded by Mrs. M. from the religious study of children.

Severity in the education of children improper.—Indiscriminate indulgence censured. Necessary qualities in a tutor.—Common faults. Punishment. Benevolence. p. 119.

‘ Rousseau is right,’ says Mrs. M. ‘ in the opinion, that the virtues of children are of the negative kind; and that in endeavouring to produce the fruits of reason and experience at too early a season, we are deprived of the harvest of a riper age. Let it be then the principal care of tutors to preserve the infant mind free from the malignant passions, and the benign affections will grow of themselves. Let it be their care to make their pupils feel the utility of benevolence, by being themselves the objects of it. Let no capricious partialities, no ill founded preference, growing from personal charms or accomplishments, or from the gifts of genius, set them the example of a departure from the strict principles of equity, and give them reason to complain both of the injustice of nature and man.

‘ But it is not through the medium of self only, that children should be taught lessons of benevolence; they should see it dispersed to every object around them with such a constancy, as should keep them in perfect ignorance that the vices of injustice and inhumanity have any existence. They ought not to be suffered to ridicule others unreproved. Should they once take a pleasure in the pain they give the human mind, benevolence will never be the leading feature in their character. As children are not able to enter into any nice examination on the different claims of wretchedness, it might be proper to avoid carrying them much in the way of objects of charity; but whenever accident presented such, they should never see them go away unrelieved.

‘ You will perhaps say, that this indiscriminate liberality might lead them into enthusiasm or prodigality, and use them to bestow their alms without judgment or preference; but neither of these consequences would ensue. Enthusiasm is the offspring of speculation, never of habitual practice; and as I have said before, children are not able to enter into those distinctions, which experience alone can teach; it is sufficient for them, if their principles and habits are of a right kind: rules of prudence are to be left to after instruction, when a larger intercourse with the world sets forth a variety of examples to view. Prodigality is a vice that either owes its rise to the little value we see put on money by those about us, or it proceeds from having our pockets loaded with coin before we can attain any knowledge of its worth. But to avoid giving my pupils habits of avarice or prodigality, or teasing them with precepts, which would undoubtedly be misunderstood, I would never put them into possession of any money, till they were of an age to be taught its value by the use they would be able to make of it.

‘ If brutes were to draw a character of man, Hortensia, do you think they would call him a benevolent being? No; their representations would be somewhat of the same kind as the fabled furies, and other infernals in ancient mythology. Fortunately for the reputation of the species, the brute can neither talk nor write; and being our own panegyrists, we can give ourselves what attributes we please, and call our confined and partial sympathy, the sublime virtue of benevolence. Goodness to man, and mercy to brutes, is all that is taught by the moralist; and this mercy is of a nature,

nature, which if properly defined, can only be distinguished by the inferiority of its degree from the vice cruelty.'

Literary education of young persons — A series of books are here recommended, calculated to open the mind;—yet, we should be almost afraid that the number mentioned are more than could be digested, unless by a youth of uncommon abilities, during the period specified, (one and twenty years); and though we think with Mrs. M. that the bible is not a book in which children should be taught to read—we should, however, rather advise a parent to let some parts, at least, be interwoven with the first youthful impressions.

The remarks on some celebrated novels are just; but still we are of opinion, that we should not so widely deviate from nature, as not to allow the imagination to forage a little for the judgment.—It may be made a question, whether the understanding has sufficient strength before it arrives at maturity to investigate such important subjects? It may be necessary for the passions to be felt before their operations can be understood, or observed to any useful or moral purpose.—The man, indeed, who at thirty, has read with attention the books here recommended, has made good use of his time. This course of reading is equally designed for girls and boys.

'I must tell you, Hortensia,' says Mrs. M. addressing her correspondent, 'lest you should mistake my plan, that though I have been obliged (in order to avoid confusion) to speak commonly in the masculine character, that the same rules of education in all respects are to be observed to the female as well as to the male children, only to conform as much as rationally can be done to the customs of Europe; for we must make some difference in the sports of our pupils, after they have passed the period of mere childhood.'

Influence of impressions.—*Example should coincide with instruction.* True, O moralist!—But then thou shouldest educate two generations:—this is the stumbling-block of education. Some observations on physical prudence, deserve to be considered.

Indiscretion. The difficulty in common life of preventing improper conversations to be started before young people, must have been felt by every person who has paid any attention to the subject before us.

Sophistry. Alluding to a well known and degrading feature in Dr. Johnson's character, Mrs. M. observes:

'Had the Doctor not unfortunately taken it into his head, that he could with innocence play the sophist for victory in conversation, he would have been a much more useful member of society than he really was, and his fame might perhaps have been greater: for truth, when defended with skill and vigour, throws a lustre on the combatant, which error cannot do. Had the niceness of his conscience led him to guard against these breaches of integrity, had he only used his great abilities in the investigating and illustrating of truth, instead of confounding the reason of others, he might, perhaps, in the course of his enquiries, have corrected in himself,

himself, and in those who enjoyed the happiness of his conversation, many errors taken up in haste, and defended from motives of vanity.'

Politeness. — *Fashion.* — *Sobriety.* — *Personal Beauty.* — *Secrecy.* — *Flattery.* — *Modesty.* — *Selfishness.* If we were to animadvert on some sentiments contained in this letter, we might be led beyond our limits, and out of our province; we therefore forbear.

Sympathy. If rectitude is, for a moment, allowed to be only founded on a principle of utility, and that utility confined to the human species, it does not authorize cruelty to the brute creation; for in doing violence to our sympathies, to the sympathies the brutes excite, we blunt our benevolence, and are not as useful to our fellow creatures, not to mention ourselves, as we should be, if we acted more consistently. 'Morals must be taught on immutable principles.' From which position Mrs. M. infers—'That true wisdom, which is never found at variance with rectitude, is as useful to women as to men; because it is necessary to the highest degree of happiness, which can never exist with ignorance.' Again, 'it would be paying you a bad compliment, were I to answer all the frivolous objections which prejudice has framed against the giving a learned education to women; for I know of no learning, worth having, that does not tend to free the mind from error, and enlarge our stock of useful knowledge.'

No characteristic difference in sex. The observations on this subject might have been carried much farther, if Mrs. M.'s object had not been a general system of education. p. 207.

'The situation and education of women,' she observes, 'is precisely that which must necessarily tend to corrupt and debilitate both the powers of mind and body. From a false notion of beauty and delicacy, their system of nerves is depraved before they come out of their nursery; and this kind of depravity has more influence over the mind, and consequently over morals, than is commonly apprehended. But it would be well if such causes only acted towards the debasement of the sex; their moral education is, if possible, more absurd than their physical. The principles and nature of virtue, which is never properly explained to boys, is kept quite a mystery to girls. They are told indeed, that they must abstain from those vices which are contrary to their personal happiness, or they will be regarded as criminals, both by God and man; but all the higher parts of rectitude, every thing that ennobles our being, and that renders us innoxious and useful, is either not taught, or is taught in such a manner as to leave no proper impression on the mind. This is so obvious a truth, that the defects of female education have ever been a fruitful topic of declamation for the moralist; but not one of this class of writers have laid down any judicious rules for amendment.'

Coquetry. Its baneful effects on the moral character of women, are explained with great perspicuity.

• *Flattery.*

Flattery.—Chastity.—Male Rakes. The reflections on female chastity are just; but they required further explanation; for till the minds of women are more enlarged, we should not weaken the salutary prejudices which serve as a substitute, a weak one we own, for rational principles.

Hints towards the education of a Prince, conclude this division of the subject.

Part II. *Influence of domestic and national education.—Athens.—Sparta.—Rome—Observations on the state of the Romans after the subversion of the Commonwealth. Causes which may have hitherto prevented Christianity from having its full effect on the manners of society.*

‘ Much has been said,’ she concludes, ‘ of the progress of civilization, but it certainly has so little tended to bring us back to classic simplicity, that we are every day departing more and more from it; and vanity, with the extension of our ideas on the article of luxury, bids fair to extinguish some of the most useful of the moral virtues out of the human character.’—However, as several good men have, notwithstanding these untoward appearances, promised to themselves a return of the golden age, as depicted by the poets, it may not be an unentertaining speculation, to examine the utility of such means as shall appear to us the most likely to conduce to the highest degree, and the most universal extent of possible good.’

Accordingly she considers *The duty of governments towards producing a general civilization.*—She proceeds to enquire into the nature of those high and important obligations which, in the reason of things, must be annexed to the office of government.’

‘ It is well known, that a great part of the ancient, and even of the modern world, have made a deity of their government, in whose high prerogatives they have buried all their natural rights. The monstrous faith of millions made for one, has been at different times adopted by the greater part of civilized societies; and even those enlightened nations who have been the most famed for asserting and defending their liberties, ran into another species of idolatry, which is almost as much at war with the happiness of individuals. Instead of making a deity of the government, they made a deity of the society in its aggregate capacity; and to the real or imagined interests of this idol, they sacrificed the dearest interests of those individuals who formed the aggregate. Thus they reversed a very plain and reasonable preposition. Society with them was not formed for the happiness of its citizens, but the life and happiness of every citizen was to be devoted to the glory and welfare of the society.

‘ When the happiness of an individual is properly considered, his interest will be found so intimately connected with the interests of the society of which he is a member, that he cannot act in conformity to the one, without having a proper consideration for the other. But reason will revolt against a service for which it finds no adequate return; and when we admire the virtue of the ancients, we admire only that inflexible conduct, which carried them to sacrifice every personal interest to principle.’

Sympathy. — *Equity.* The pernicious effects which public executions and slaughterhouses have on the manners of the people at large, as equally incompatible with benevolence and equity, are very cogently and forcibly insisted on.—Indeed it must be granted that the frequent sight of wanton cruelty to brutes, has a direct tendency to weaken every social affection; and as the mass of men are undoubtedly only guided by feeling and habit, it is not necessary to point out the consequences which must naturally ensue. p. 278.

‘ Oh! then let all slaughter-houses be treated as nuisances; let them be sequestered from the haunts of men; let premiums be given to those who can find out the least painful manner of taking away the lives of those animals which are necessary for sustenance; let every other manner of depriving them of life be forbidden, under severe penalties; let the privation of life, by way of sport and amusement, be discouraged by example and precept; and it is more than probable, that such a spirit of benevolence will be diffused over the minds of the public, as may tend to the general practice of those virtues, which reason approves, and which Christianity ordains.

‘ It has been a question lately much agitated, whether any such necessity exists, as is pretended, of depriving those delinquents of their lives, who act against the public peace, by treasonable offences, and by injuring a fellow citizen’s life or property. Those who take the benevolent side of the question, maintain, that the depriving a citizen of his life, is a breach of one of the fundamental obligations of government, and that there may be found a variety of punishments more fully adequate to the preservation of the public peace, than acts of violence which shock the sensibility of the feeling mind, and harden to a state of barbarism the unfeeling one. Those who take the adverse side of the question, oppose these positions with many plausible arguments; but whether the necessity contended for, really exists in the nature of things, or whether it exists only in the indolence of government, and their inattention to the happiness of the community in their individual capacity, certain it is, that the interests of humanity and the dictates of good policy, require that the examples of taking away life should be as few as the nature of things will admit. That all the ceremonies which attend this melancholy act, should be made as awful as possible; and that to prevent the public from receiving any impression which may shock the compassionate part of the society, or contribute to steel the hearts of the more insensible, all executions should be performed in private.’

Observations on Penal Laws.—Houses of Correction.—Charity. The abuse of public charities has long been a subject of complaint, and we perfectly agree with Mrs. M. that ‘ no law can possibly answer the benevolent purposes of the legislature, but one that entirely takes the executive part out of the hands of those who have an interest in abusing the trust, and whose mean situations in life, and low education, render them deaf to the voice of

of sympathy, and callous to the stings of remorse.' Could the rich be induced to employ themselves in softening the distresses of the poor, what good effects would result to both!*

'But the habits adopted by the gay and rich,' observes our author, 'and the common received notion, that a pleasurable life is the only way in which the advantages of fortune can be enjoyed, will raise insurmountable obstacles and objections to this opinion on the real duties of charity. To these objections, there is but one answer to be given, but that is a strong one, viz. That those who prize pleasure beyond satisfaction, have never experienced the superiority of the latter in the scale of happiness.'

Hints towards a more general civilization, by an attention to the objects of sense. The ingenious remarks contained in this and the three following letters, do equal honour to the author's discernment and benevolence.

'But it is not only habits of personal cleanliness which nations should be zealous of adopting, who pretend to any high degree of civilization, or who are ambitious of attaining it; cleanliness in every possible mode, is a luxury which ought to meet with all the encouragement which example and power can give: for we may find among the inhabitants of a neat cottage, sentiments which would grace the exalted ranks of life; but never did a filthy hovel send forth a civilized citizen.'

* In our public hospitals the poor are shamefully left a prey to the ignorant and the interested. The medical gentlemen who superintend them, visit the sick at certain hours, when they are expected, and, of course, find every thing in order; but, if some benevolent person, with a sound understanding, who had the power of entering at any time, would attend to the complaints of the poor wretches, and lay them before the committee—how many comforts might be procured them, and they would be effectually shielded from the rapacity of nurses, &c. who feed on their very vitals. A friend of the writer of this article, has frequently visited the public hospitals, and seen the state of the sick. The meat, in summer, is often putrid, and never served up in a decent manner, though in this desolate condition, the only comfort within the reach of these poor creatures, is a wholesome meal. Many who enter are, of course, friendless; yet they must lose the benefit of the charity, or pawn their clothes to keep themselves decent, for the charity does not provide them with clean linen. I must be allowed to mention a fact:—A widow woman, who had long been unable to work on account of a disorder which had fallen into her leg, at last consented to have it amputated, and the few shillings, allowed by the charity to procure her some indulgencies, at that juncture, were all demanded by the nurse for washing an extraordinary number of sheets. Silence is absolutely necessary for the sick, yet when some poor neglected wretches were breathing their last, the most infernal noise has been made by servants employed to clean the ward, in a hurry, that the committee might find every thing in order.

‘Gardening.

Gardening.—Architecture.—Domestics.—Drama. The salutary effects which might be produced by such an attention to objects of sense as would refine the pleasures they procure us, are traced with philosophic eye.

Religious sentiments universal among the ancients. Hints towards rendering the fine arts subservient to religion. It may be made a question whether society will ever be in such a cultivated state, that the fine arts, instead of pampering vice, and destroying simplicity of manners, may be rendered subservient to religion and virtue. That true taste is subservient to religion cannot be doubted—for a love of order and beauty, leads directly to admiration of their author.

Part III. On the Origin of Evil. An examination of the different solutions of this important difficulty in morals, particularly Dr. King's, the basis of Pope's *Essay on Man*, is first entered on. p. 342.

‘Dr. King,’ Mrs. M. observes, ‘sets out with a denial of that catholic opinion in the creed of the moralist, a moral beauty and a moral deformity, necessarily independent of the will of every being created or uncreated. It is explained by Plato, under the form of everlasting ideas or moral entities, coeval with eternity, and residing in the divine mind, from whence by irradiating rays, like the emitting of the sun beams, they enlighten the understanding of all those intellectual beings, who, disregarding the objects of sense, give themselves up to the contemplation of the deity. The modern philosopher in a lower strain of reasoning asserts, that there is an abstract fitness of things perceived by the mind of God, and so interwoven in the nature of contemplative objects, as to be traced, like abstract truths, by those faculties of the mind, which enable us to compare and perceive the agreement and disagreement of our sensitive and reflex ideas.’

Some of the difficulties respecting the origin of evil perhaps arise from a blind kind of respect to the power of God.—It has been thought disrespectful even to limit his power by supposing it dependent on, or directed, by his wisdom—and some well-disposed persons might almost think it blasphemy to repeat the sentiments of a German writer on this subject; that probably God *could not* instantly render an intelligent creature virtuous—it *must* be an acquirement.—The perfection of power is its consistency with wisdom: choosing the wisest (the right way) of producing the intended effect. They would possibly answer in my uncle Toby's words, ‘God can do any thing.’ The existence of evil may be denied, when, what we call by that name, is considered as the surest means of procuring the greatest good for the individual, and that it could not exist without the permission of God, who foresaw it, when he called us into being; but who that has attentively surveyed the world can deny the existence of *present* evil?—But to return to our author, who would not, perhaps, perfectly coincide with these opinions,

opinions, though it does not appear to us clear that we weaken the notion of the irresistible power of God, when we suppose it guided by wisdom.—His power is superior to every obstacle, yet no contradiction is implied by saying, that he *can* only do what his wisdom points out as the best. The grandest idea which we can form of God is, that his motives are always right, and his Will wisdom. From her eagerness to defend revelation, Mrs. M. has not treated this part of the subject with sufficient precision—for she, notwithstanding, thinks, philosophically, that moral necessity extends to God.

On the unlimited Power of God. Mrs. M. very justly concludes, that that system of philosophy must be obnoxious to morality that ‘sets out with introducing an uncertainty respecting the nature of virtue; and by taking away the essential and eternal discriminations of moral good and evil, of just and unjust, and reducing these to arbitrary productions of the divine will, or rules and modifications of human prudence and sagacity, it takes away one regular, simple, and universal rule of action for all intelligent nature.’ Surely it is, as she intimates, entertaining a very derogatory idea of the Supreme Being, to suppose that power, and independent existence, is the only determinate attributes to be ascribed to him; and the humility appears equally false that fixes the origin of right and wrong, in the arbitrary determinations of the divine will, denying the existence of an abstract fitness of things.

That the injudicious Defenders of Religion, have given means of triumph to the Infidel. She means the injudicious defenders of the Christian religion.—For a glimpse of immortality was caught before the promulgation of the Gospel, and all the hopes of futurity, founded on the attributes of God, are not clouded, at least do not vanish, when a firm belief in revelation is shaken; and God may be reverenced, as perfectly good and benevolent, by those who do not call themselves believers.

Perfect Benevolence of God.—Observations on Lord Bolingbroke's Philosophy. The reflections here introduced are just, as far as they go; but we must restrain ourselves, and not pursue a train of reason not consistent with our character.—It is sufficient to remark, that Lord Bolingbroke's superficial philosophy would sink, or perhaps has sunk, into oblivion, without the illuminating light of this able pen.

The same subject continued—a Revelation in the Person of Christ, worthy of Divine Wisdom.—Arguments for the belief of a future state. To believe that all things are ordered by a perfect being, and not to believe in a future state, is a manifest contradiction.—From the many sensible arguments for a future state, which are forcibly expressed, if they are not new, we shall extract one. p. 385.

• Had

Had man been only created for the purpose of filling a rank on this terrestrial globe, the system of his economy would never have been constituted in such a manner, as to have made this life a state of trial, and his short day would never have been chequered with so large a portion of misery, as to render it a doubtful question, whether existence is worth having on such severe terms. That high privilege, reason, which raises him to so painful a superiority above his fellow animals, might have been well spared for a more useful instinctive principle, which would have necessarily led him to avoid every object of such a quality as to bring on him pain and misery, and to pursue every one necessary to the pleasure and support of his existence. Had he been endued with reason, it might have been of that commanding kind, as to subdue every hostile impression, and to be superior to all the seductive excitements of appetite and passion. Or the appetites and passions might have been balanced by so strong and over-ruling a sympathy, as to counteract, on a principle of universal benevolence, all those mischiefs which he draws on himself and others, by an inordinate and injudicious selfishness. The short space of time allotted for his existence, might, in such circumstances, have been spent with the enjoyment of health and tranquility, and in an uninterrupted series of pleasing sensations; neither rising to the tumults of pleasure, nor changing into the anguish of pain. And when he had finished his course, he might have quitted his existence with all that soft tranquility which attends the state of the body, when it resigns itself to the peaceful empire of sleep.

By such economy of nature, existence, however short, must have been esteemed a gift worthy of perfect benevolence to bestow. But in regard to those faculties of the mind, which on a state of positive mortality, seem to have been given as a curse, rather than a blessing, their ever growing and improving powers form another very strong conjecture in favor of their perpetuity.'

Some of the contradictions to be found in Lord B.'s works pointed out—No miraculous interposition necessary to confirm or strengthen the evidence of Gospel revelation. Or rather Mrs. M. meant to say, that such an interposition would interfere with the design of providence, and prevent those trials deserving the name of trials which evidently produce virtue. We shall close our account of this part of the subject, which an analysis cannot do justice to, with a sensible observation. p. 423.

It has often been said, that some of the most devout people, are the most addicted to the grossest interests of self. This, if true, must undoubtedly arise from the sordid nature of that allegiance which they pay to the Deity, and from the false conceptions they have entertained of the general principles of his service. I must acknowledge that I have often heard with regret some very moral and religious people declare, that if they had been assured of the positive mortality of their nature, their lives would have been directed by a contrary rule. Thus, if by such a persuasion they had gained a liberty from the restraints of religion, they would have followed every perverse motion of their will; and found

found to their cost, that their liberty consisted in being kept in a continual subjection to their passions, and the being imposed on in their most important choice.'

On the philosophy and doctrines of the Stoics. The doctrines of the Stoics are clearly stated by Mrs. M. and some unjust aspersions wiped off, which bigotry and ignorance have industriously propagated, to render doctrines ridiculous or odious, which deserve respect.

The question of Free-will and Necessity, involved in the study of the human mind.—Statement of the opinions entertained by the Free-Willers. Though this is an impartial statement of the opinions of the Free-Willers, yet very few of them, in direct terms, assert, what their first position, that man has an independent will, and can choose either good or evil, without being influenced by any motive, leads to:—they have not sufficiently considered the subject, or argue more vaguely to parry off some home questions.—But it is probable, that the principal difficulty amongst superficial reasoners, turns on the different meanings which the disputants affix to the same words, confounding physical and moral necessity.

Observations on the Opinion of the Free-Willers.—Moral Necessity defended. These acute observations on moral necessity, are a very judicious conclusion to a book on education, for the influence of motives on human conduct, and the necessity of informing the understanding, that it may regulate the will, is the grand spur to industry, in every attempt to promote domestic and national education. So that she rationally draws the following inferences. p. 484.

‘ By the explanation of those different circumstances in the course of human life, which give rise to the two opposite necessities of doing good, or doing evil, it will appear, that bad governors, bad tutors, and bad company, are the primary authors of all the evil volitions of the species; and that ignorance is a foil in which no uniform virtue can take root and flourish. It will also appear by the invariable experience of mankind on the principle of philosophical liberty, as on the principle of philosophical necessity. For will any of the abettors of this doctrine say, that a child born of wicked parents, and who has been taught the proper distinctions between virtue and vice, and their influences on the rational interest of the species, who has also kept bad company, and acquired bad habits from its early infancy, can be in so likely a way of attaining to the perfection of virtue, as one born of good parents, well educated, and whose conversation has been among people from whom he has received the best impressions?’

It is not easy to give a clear general view of argumentative discussions, nor to cite passages which would enable those who do not see their connexion, and how they illustrate what has gone before, to comprehend the full force of the reasoning:—we must therefore refer our readers to the book itself, if they wish to read a clear and able statement of a question, which

‘ Had man been only created for the purpose of filling a rank on this terrestrial globe, the system of his œconomy would never have been constituted in such a manner, as to have made this life a state of trial, and his short day would never have been chequered with so large a portion of misery, as to render it a doubtful question, whether existence is worth having on such severe terms. That high privilege, reason, which raises him to so painful a superiority above his fellow animals, might have been well spared for a more useful instinctive principle, which would have necessarily led him to avoid every object of such a quality as to bring on him pain and misery, and to pursue every one necessary to the pleasure and support of his existence. Had he been endued with reason, it might have been of that commanding kind, as to subdue every hostile impression, and to be superior to all the seductive excitements of appetite and passion. Or the appetites and passions might have been balanced by so strong and over-ruling a sympathy, as to counteract, on a principle of universal benevolence, all those mischiefs which he draws on himself and others, by an inordinate and injudicious selfishness. The short space of time allotted for his existence, might, in such circumstances, have been spent with the enjoyment of health and tranquility, and in an uninterrupted series of pleasing sensations; neither rising to the tumults of pleasure, nor changing into the anguish of pain. And when he had finished his course, he might have quitted his existence with all that soft tranquility which attends the state of the body, when it resigns itself to the peaceful empire of sleep.

‘ By such œconomy of nature, existence, however short, must have been esteemed a gift worthy of perfect benevolence to bestow. But in regard to those faculties of the mind, which on a state of positive mortality, seem to have been given as a curse, rather than a blessing, their ever growing and improving powers form another very strong conjecture in favor of their perpetuity.’

Some of the contradictions to be found in Lord B.’s works pointed out—No miraculous interposition necessary to confirm or strengthen the evidence of Gospel revelation. Or rather Mrs. M. meant to say, that such an interposition would interfere with the design of providence, and prevent those trials deserving the name of trials which evidently produce virtue. We shall close our account of this part of the subject, which an analysis cannot do justice to, with a sensible observation. p. 423.

It has often been said, that some of the most devout people, are the most addicted to the grossest interests of self. This, if true, must undoubtedly arise from the sordid nature of that allegiance which they pay to the Deity, and from the false conceptions they have entertained of the general principles of his service. I must acknowledge that I have often heard with regret some very moral and religious people declare, that if they had been assured of the positive mortality of their nature, their lives would have been directed by a contrary rule. Thus, if by such a persuasion they had gained a liberty from the restraints of religion, they would have followed every perverse motion of their will; and found

found to their cost, that their liberty consisted in being kept in a continual subjection to their passions, and the being imposed on in their most important choice.'

On the philosophy and doctrines of the Stoics. The doctrines of the Stoics are clearly stated by Mrs. M. and some unjust aspersions wiped off, which bigotry and ignorance have industriously propagated, to render doctrines ridiculous or odious, which deserve respect.

The question of Free-will and Necessity, involved in the study of the human mind.—*Statement of the opinions entertained by the Free-Willers.* Though this is an impartial statement of the opinions of the Free-Willers, yet very few of them, in direct terms, assert, what their first position, that man has an independent will, and can choose either good or evil, without being influenced by any motive, leads to:—they have not sufficiently considered the subject, or argue more vaguely to parry off some home questions.—But it is probable, that the principal difficulty amongst superficial reasoners, turns on the different meanings which the disputants affix to the same words, confounding physical and moral necessity.

Observations on the Opinion of the Free-Willers.—*Moral Necessity defended.* These acute observations on moral necessity, are a very judicious conclusion to a book on education, for the influence of motives on human conduct, and the necessity of informing the understanding, that it may regulate the will, is the grand spur to industry, in every attempt to promote domestic and national education. So that she rationally draws the following inferences. p. 484.

‘By the explanation of those different circumstances in the course of human life, which give rise to the two opposite necessities of doing good, or doing evil, it will appear, that bad governors, bad tutors, and bad company, are the primary authors of all the evil volitions of the species; and that ignorance is a foil in which no uniform virtue can take root and flourish. It will also appear by the invariable experience of mankind on the principle of philosophical liberty, as on the principle of philosophical necessity. For will any of the abettors of this doctrine say, that a child born of wicked parents, and who has been taught the proper distinctions between virtue and vice, and their influences on the rational interest of the species, who has also kept bad company, and acquired bad habits from its early infancy, can be in so likely a way of attaining to the perfection of virtue, as one born of good parents, well educated, and whose conversation has been among people from whom he has received the best impressions.’

It is not easy to give a clear general view of argumentative discussions, nor to cite passages which would enable those who do not see their connexion, and how they illustrate what has gone before, to comprehend the full force of the reasoning:—we must therefore refer our readers to the book itself, if they wish to read a clear and able statement of a question, which

metaphysicians have not yet brought to an issue, though in the conduct of both parties there appears more similarity than in their opinions.—The virtuous Free-Willer still continues to cultivate his mind with as much care, that he may discern good from evil, and choose accordingly, as if he believed that the understanding was *quite* independent on the will; and in the education of his children he labours to fix good principles and habits, that every incitement of appetite may not lead the will astray; or, if the impulses of passion should have led them into error, that the understanding might have motives at hand to bring them back to virtue and regulate their choice.—The vicious necessitarian, on the contrary, suffers himself to grow as vain when he is flattered, and as angry when he is injured, as if his views were more confined:—and after neglecting the education of his children, seems as much surprised at their disobedience, as he could be, if he believed that good motives had no effect on the will, or that the parent who has not given a substantial proof of parental affection by instilling motives sufficiently strong to produce rational, filial love and respect, has no right to expect it.—But to close our review:—This work, which we warmly recommend to parents, adds new lustre to Mrs. M.'s character as an historian and a moralist, and displays a degree of sound reason and profound thought which either through defective organs, or a mistaken education, seldom appears in female productions.

M.

ART. II. *Transactions of the Royal Society of Edinburgh.*
4to. VOL. II. 587 pages, and 9 plates. Price 1l. 5s. in
boards. Edinburgh, Dickson; London, Cadell. 1790.

THIS volume, like the former is divided into three parts, the history of the society, the papers of the physical class, and the papers of the literary class. We shall pass over the history of the society, as it contains little else but minutes of the business which occupied the attention of this learned body on the several days of their meeting. The appendix to this part contains the list of members, or fellows, continued since the publication of the first volume. List of officers and of members deceased, and also biographical accounts of the right honourable Robert Dundas of Arniston, lord president of the Court of Session; of Sir Alexander Dick, of Prestonfield, Bart. M. D. of the right honourable Thomas Miller, of Glenlu, Bart. lord president of the Court of Session.

PAPERS OF THE PHYSICAL CLASS.

Art. 1. *Of certain natural Appearances of the Ground on the Hill of Arthur's Seat.* By James Hutton, M. D. F. R. S. Edin. and Member of the Royal Academy of Agriculture at Paris.

This natural appearance at a distance, resembled the withered grass of a foot path, but traversed a shoulder of the hill in

such a direction, as corresponded to neither sheep track nor foot path. Upon a near inspection, it appeared to be a narrow stripe of the grass quite dead and withered. The breadth of this stripe was about nine, or in some places, twelve inches; the sides of this track were perfectly defined without any gradation from green to withered grass, all the plants in the track being killed without the contiguous part having suffered in the least. Its length was considerable, a hundred yards or two extending from the south-east side of the southmost hill, through a hollow, and ascending obliquely the shoulder of the summit of Arthur's seat, on the south-east side.

The appearance now described was not the only one of its kind. Parallel to each of those tracks of withered grass was another, which appeared by the state of the grass, as if it had been made the year before, and was in general only a few inches distant from the other, sometimes exceedingly near it, but rarely or never contiguous. The tracks were not uniformly continuous, and the breaks in the parallel tracks corresponded with each other. Besides the brown colour of those new made tracks, there was another stripe of a dark green, which was owing to new grass growing in a track probably made a year before the earliest of the others.

Dr. Hutton specifies a variety of curious particulars respecting these appearances, and enquires how far it may be apprehended, that they owe their origin to electricity, or the action of insects. We cannot analyse these enquiries as they are, more especially as the doctor has been too candid to draw any decided conclusions from the facts before him.

Art. II. An Account of the Method of making the Otter of Ross, as it is prepared in the East Indies. Communicated in a Letter from Donald Monro, M. D. of London, to Mr. John Robison, Professor of Natural Philosophy in the University of Edinburgh.

This receipt comes from Major Mackenzie, of Coull, in the county of Ross, who informed the doctor, that he got the account from an officer of his corps, who was up in the country where it is prepared, and assisted in making it himself.

‘ Take a very large glazed earthen or stone jar, or a large clean wooden cask; fill it with the leaves of the flowers of roses, very well picked, and freed from all seeds and stalks; pour on them as much pure spring water as will cover them, and set the vessel in the sun in the morning at sun rise, and let it stand till the evening, when take it into the house for the night: expose it in this manner for six or seven successive days, and, at the end of the third or fourth day, a number of particles of a fine yellow oily matter, will float on the surface, which, in two or three days more, will gather into a scum, which is the otter of roses. This is taken up by some cotton,

metaphysicians have not yet brought to an issue, though in the conduct of both parties there appears more similarity than in their opinions.—The virtuous Free-Willer still continues to cultivate his mind with as much care, that he may discern good from evil, and choose accordingly, as if he believed that the understanding was *quite* independent on the will; and in the education of his children he labours to fix good principles and habits, that every incitement of appetite may not lead the will astray; or, if the impulses of passion should have led them into error, that the understanding might have motives at hand to bring them back to virtue and regulate their choice.—The vicious necessitarian, on the contrary, suffers himself to grow as vain when he is flattered, and as angry when he is injured, as if his views were more confined:—and after neglecting the education of his children, seems as much surprised at their disobedience, as he could be, if he believed that good motives had no effect on the will, or that the parent who has not given a substantial proof of parental affection by instilling motives sufficiently strong to produce rational, filial love and respect, has no right to expect it.—But to close our review:—This work, which we warmly recommend to parents, adds new lustre to Mrs. M.'s character as an historian and a moralist, and displays a degree of sound reason and profound thought which either through defective organs, or a mistaken education, seldom appears in female productions.

M.

ART. II. *Transactions of the Royal Society of Edinburgh.*
4to. VOL. II. 587 pages, and 9 plates. Price 1l. 5s. in
boards. Edinburgh, Dickson; London, Cadell. 1790.

THIS volume, like the former is divided into three parts, the history of the society, the papers of the physical class, and the papers of the literary class. We shall pass over the history of the society, as it contains little else but minutes of the business which occupied the attention of this learned body on the several days of their meeting. The appendix to this part contains the list of members, or fellows, continued since the publication of the first volume. List of officers and of members deceased, and also biographical accounts of the right honourable Robert Dundas of Arniston, lord president of the Court of Session; of Sir Alexander Dick, of Prestonfield, Bart. M. D. of the right honourable Thomas Miller, of Glenlu, Bart. lord president of the Court of Session.

PAPERS OF THE PHYSICAL CLASS.

Art. 1. *Of certain natural Appearances of the Ground on the Hill of Arthur's Seat.* By James Hutton, M. D. F. R. S. Edin. and Member of the Royal Academy of Agriculture at Paris.

This natural appearance at a distance, resembled the withered grass of a foot path, but traversed a shoulder of the hill in such

such a direction, as corresponded to neither sheep track nor foot path. Upon a near inspection, it appeared to be a narrow stripe of the grass quite dead and withered. The breadth of this stripe was about nine, or in some places, twelve inches; the sides of this track were perfectly defined without any gradation from green to withered grass, all the plants in the track being killed without the contiguous part having suffered in the least. Its length was considerable, a hundred yards or two extending from the south-east side of the southmost hill, through a hollow, and ascending obliquely the shoulder of the summit of Arthur's seat, on the south-east side.

The appearance now described was not the only one of its kind. Parallel to each of those tracks of withered grass was another, which appeared by the state of the grass, as if it had been made the year before, and was in general only a few inches distant from the other, sometimes exceedingly near it, but rarely or never contiguous. The tracks were not uniformly continuous, and the breaks in the parallel tracks corresponded with each other. Besides the brown colour of those new made tracks, there was another stripe of a dark green, which was owing to new grass growing in a track probably made a year before the earliest of the others.

Dr. Hutton specifies a variety of curious particulars respecting these appearances, and enquires how far it may be apprehended, that they owe their origin to electricity, or the action of insects. We cannot analyse these enquiries as they are, more especially as the doctor has been too candid to draw any decided conclusions from the facts before him.

Art. II. An Account of the Method of making the Otter of Roses, as it is prepared in the East Indies. Communicated in a Letter from Donald Monro, M. D. of London, to Mr. John Robison, Professor of Natural Philosophy in the University of Edinburgh.

This receipt comes from Major Mackenzie, of Coull, in the county of Ross, who informed the doctor, that he got the account from an officer of his corps, who was up in the country where it is prepared, and assisted in making it himself.

'Take a very large glazed earthen or stone jar, or a large clean wooden cask; fill it with the leaves of the flowers of roses, very well picked, and freed from all seeds and stalks; pour on them as much pure spring water as will cover them, and set the vessel in the sun in the morning at sun rise, and let it stand till the evening, when take it into the house for the night: expose it in this manner for six or seven successive days, and, at the end of the third or fourth day, a number of particles of a fine yellow oily matter, will float on the surface, which, in two or three days more, will gather into a scum, which is the otter of roses. This is taken up by some cotton,

ton, tied to the end of a piece of stick, and squeezed with the finger and thumb into a small phial, which is immediately well stopped; and this is repeated for some successive evenings, or while any of this fine essential oil rises to the surface of the water.'

‘N. B. I have been informed, that some few drops of this essential oil have been more than once collected by distillation, in the same manner as the essential oils of other plants here in London.’

Art. III. Description of a Mercurial Level. Invented by Alexander Keith, Esq; F. R. S. and A. S. Edinburgh.

This level consists of a long box containing mercury, with floating sights at each end. The contrivances for rendering it accurate and manageable, are sufficiently ingenious; but as we think all accurate observers will join us in giving the preference to the spirit level, as well for cheapness as for portableness and accuracy, we think it hardly necessary to enter into any minute description of this instrument.

Art. IV. Pathological Observations on the Brain. By Mr. Thomas Anderson, F. R. S. Edinburgh, Surgeon at Leith, and Fellow of the Royal College of Surgeons.

From six cases in which the brain was affected, but which cannot with any degree of accuracy be abridged, Mr. Anderson infers,

1. That when one hemisphere of the brain is affected, it generally produces its morbid symptoms on the opposite side of the body.

2. That when both hemispheres are affected, the whole body suffers.

3. That though one hemisphere only is affected, when the injury is great, the whole body will suffer.

4. That though the cerebrum alone is hurt, it produces morbid symptoms in all muscles of voluntary motion, whether their nerves take their rise immediately from the cerebrum, from the cerebellum, or from the medulla oblongata.

5. That in cases of external accident, where one side is affected, it is more favourable than when both sides suffer.

Art. v. Experiments on the expansive Force of freezing Water, made by Major Edward Williams, of the Royal Artillery at Quebec, in Canada, in the Years 1784 and 1785. Communicated in a Letter from Charles Hutton, L. L. D. F. R. S. S. London and Edinburgh, and Professor of Mathematics in the Royal Military Academy of Woolwich, to Professor John Robison, General Secretary of the Royal Society of Edinburgh.

These experiments were made by driving plugs of iron into the aperture of iron shells. When the plug was simply driven into

into the shell nearly filled with water, it was driven out with great velocity at the instant of congelation, and a bolt or cylinder of ice, of a considerable length, immediately shot up from the hole. But when the plug was fixed in with springs, which laid hold of the inside of the cavity, so that it could not possibly be pushed out, the force of expansion split the shell, and a fin or plate of ice shot out quite around.

Art. VI. Abstract of Experiments made to determine the true Resistance of the Air, to the Surfaces of Bodies of various Figures, and moved through it with different Degrees of Velocity.
By Charles Hutton, L. L. D. Professor of Mathematics in the Royal Military Academy at Woolwich, and F. R. S. London and Edinburgh.

These experiments were made, by affixing an hemisphere of pasteboard to a lever, projecting at right angles from an axis moved by a descending weight. It is evident, that when the requisite deductions have been made for the friction and other disturbing impediments, and the descent of the weight has become uniform, that weight will be in equilibrio with the resistance of the air on the face of the pasteboard, and consequently it will, when reduced in proportion to the respective distances of the places of action from the axis of motion, express the pressure or resistance of the air against the pasteboard. The trials were made with the round side of the hemisphere, and also with the flat side. From these it appears, that the resistance to the flat side is to that on the round side, on an average, as 2.45 to 1, whereas by the theory of the resistance of fluids, the ratio would have been only 2 to 1. Whether this may arise for the most part from the air being a less perfect fluid than the theory contemplates, or whether the form of the hinder part of the body may considerably influence the result, is not attempted to be shown by the doctor, but is referred to future experiments which he proposes to make.

Art. VII. Observations of the Places of the Georgian Planet, made at Edinburgh with an Equatorial Instrument. By John Robison, A. M. F. R. S. Edinburgh, and Professor of Natural Philosophy in the University of Edinburgh.

Professor Robison deduces from a series of observations made in the month of January 1787, that the planet was in opposition, January, 13 d. 4 h. 56 m. mean time at Greenwich, in longitude 3 f. 23 d. 32 m. 24 sec. from the mean equinox, with 30 m. 38 sec. north heliocentric latitude.

Art. VIII. Answers to the Objections of Mr. De Luc, with regard to the Theory of Rain. By James Hutton, M. D. F. R. S. Edinburgh, &c.

VOL. VIII.

T

As

As we could not, on account of the necessary brevity of our plan, enter into the theory of Dr. Hutton, exhibited by him in a very long paper in the first volume of the Edinburgh Transactions, we are still more effectually prevented by the same motive, from stating either Mr. De Luc's observations, or the replies of Dr. Hutton, which occupy 20 pages of the present volume.

Art. ix. An Account of a Distemper by the common People in England, vulgarly called the Mumps. By Robert Hamilton, M. D. Fellow of the Royal College of Physicians, F. R. S. Edinburgh, and Physician at Lynn Regis, in Norfolk.

Dr. Hamilton accurately describes the symptoms and progress of this epidemic disease, which he calls *Angina Maxillaris*, and his treatment in a considerable extent of practice. This disease being scarcely known to the faculty, renders the present treatise well deserving their attention; but at the same time prevents us from attempting the extended analysis of its contents, which would be required to render our account of any use.

Art. x. A Botanical and Medical Account of the Quassia Simaruba, or Tree which produces the Cortex Simaruba. By William Wright, M. D. F. R. S. London and Edinburgh, and Physician General in Jamaica.

Dr. Wright gives an historical account of the Simaruba bark, a description of the tree, and also the sensible qualities, preparations, and medical virtues in general of the bark. Most authors agree, that in fluxes it restores the lost tone of the intestines, allays their spasmodic motions, promotes the secretions by urine and perspiration, removes the lowness of spirits attending dysenteries, and disposes the patient to sleep; the gripes and tenesmus are taken off, and the stools are changed to their natural colour and consistence. In a moderate dose it occasions no disturbance or uneasiness, but in large doses it produces nausea and vomiting.

The doctor's own experience, and that of many living friends, afforded convincing proofs of the efficacy of this medicine, such as induce him to hope, that it will soon be in more general use.

This paper is accompanied with botanical descriptions and plates of the Quassia Samiruba, *mas. et femina.*

Art. xi. On the Motion of Light, as affected by refracting and reflecting Substances, which are also in Motion. By John Robison, M. A. F. R. S. Edinburgh, and Professor of Natural Philosophy in the University of Edinburgh.

It is with some concern, that for want of the diagrams, as well as for want of sufficient room, we cannot follow this most ingenious author through the curious objects of research which

which occupy his paper. The celebrated Boscovich published two papers on the effect which is produced upon the apparent place of visible objects, by the motion of the observer, and among other deductions he made the following: if a telescope be constructed, having its tube filled with water, and be directed to a terrestrial object properly situated, it will be found to deviate from that object by a certain determinate quantity every day. Whence it will follow, that a person shut up in a mine or dungeon, may, without seeing the sun or heavens, discover the motion of the earth round the center of the solar system, and also whether this center be in motion, and the velocity and direction of this motion. The reader, who may not have attended to these delicate speculations, will require to be told, that light, being supposed to consist of particles in progressive motion, must have its velocity increased by the action of refracting substances when it enters them, and has its course inflected towards the perpendicular: And the action of refracting bodies at rest, being directed in lines perpendicular to their surfaces, will not produce the same effect, if the refracting body be in motion. The researches of Boscovich, professor Wilson, and the author of the present paper, have been directed to a determination of the consequences of such a motion, and also to infer the quantity and direction of the motion itself, from a due measure of the effect which it produces. We cannot here profess to enter into these; but shall only observe, that professor Robison has detected a fallacy in the reasoning of Boscovich, which destroys his conclusion.

A variety of corollaries are deduced by our author, from the fundamental position, that if a ray of light moving in any direction, and with any velocity, meet with the surface of a refracting medium which is in motion, its final relative motion will be the same as if the medium had been at rest, and the light had approached it, with the same initial relative motion.

Art. XII. Demonstrations of some of Dr. Matthew Stewart's General Theorems. By Robert Small, D. D. F. R. S. Edinburgh.

Mathematical demonstration being in its own nature incapable of abridgment, and the theorems which form the subject of the present paper having reference to figures, cannot be transcribed for want of the plates.

Art. XIII. Remarks on the Astronomy of the Brahmins. By John Playfair, A. M. F. R. S. Edinburgh, and Professor of Mathematics in the University of Edinburgh.

In this copious and elaborate performance, Mr. Playfair examines the rules of computation of the oriental astronomy, and by considering their errors, as produced by the secular

equations, not being applied by the modern Indians, he deduces arguments which prove the high antiquity of that science among them.

Art. xiv. On the Resolution of indeterminate Problems. By John Leslie, A. M.

The principle upon which Mr. Leslie resolves the complicated expressions, obtained in the solution of indeterminate problems, into simple equations, is as follows.

Let $a \times b$, be any compound quantity equal to another $c \times d$, and let m be any rational number assumed at pleasure. It is manifest, that taking equimultiples $a \times m b = c \times m d$. If therefore we suppose that $a = m d$, it must follow that $m b = c$, or $b = \frac{c}{m}$.

Thus two equations of a lower dimension are obtained. If these be capable of farther decomposition, we may assume the multiples α and β , and form four equations still more simple. By the repeated application of this principle, an higher equation, if it admit of divisions, will be resolved into those of the first order, the number of which will be one greater than that of the multiples assumed. Hence the number of simple equations, into which a compound expression can be resolved, is equal to the sum of the exponents of the unknown quantities in the highest term. Wherefore, a problem can be solved, by the application of this principle only, when the aggregate sum formed by the addition of the exponents, in the highest terms of the several equations proposed, is at least equal to the number of the unknown quantities together, with that of the assumed multiples.

The mode of applying this principle, is illustrated by a considerable number of problems.

Art. xv. A Dissertation on the Climate of Russia. By M. Guthrie, M. D. Physician to the Imperial Corps of Noble Cadets at Petersburgh, F. R. S. S. Lond. and Edin. with Two Letters from his Excellency M. Æpinus, Counsellor of State, Knt. of the Order of St. Anne, &c. &c.

This author first describes the phenomena of the Russian winter. Spring and autumn scarcely can be said to exist in that climate, their periods are so short. The summer is excessively hot. A very considerable number of sagacious and philosophical remarks present themselves throughout this paper.

M. Æpinus's letter contains a variety of observations, which, like every production of that excellent writer, have peculiar force. Much of his letter is employed in explaining the electrical appearances, which take place in Russia when the air has been for several weeks dried by frost. The only effect we shall here mention, is very remarkable, especially in rooms warmed with stoves. In these, though the thermometer may not stand higher than 60° , yet all the effects of parching heat are felt. Furniture and wainscots crack, the covers of books curl,

curl up, and the human body is slightly affected, particularly with a sensation of lassitude, and a dryness of the throat. These circumstances arise from the great absorption of humidity. In summer, the warm air is saturated with moisture from without; in winter it deposits its moisture by cold before it enters our rooms, where it is heated, and then re-absorbs humidity from every thing which contains it. *Aëpinus* recommends the evaporation of water in rooms thus circumstanced, or which is more simple, he proposes to hang up a wet cloth in the room, taking care to wet it again when it has become dry.

PAPERS OF THE LITERARY CLASS.

Art. I. An Account of some extraordinary Structures on the Tops of Hills, in the Highlands; with Remarks on the Progress of the Arts among the ancient Inhabitants of Scotland. By Alexander Fraser Tytler, Esq; Advocate, F. R. S. Edin. and Professor of Civil History in the University of Edinburgh.

Certain remains of real or supposed walls, and fortifications, were discovered on the summits of some hills in the Highlands, by Mr. John Williams; and his remarks on them were published in 1777, in which he conjectured, from their vitrified state, that they had been cemented by the aid of fire. This excited the researches of other enquirers, some of whom agreed with Mr. Williams; and others, instead of walls and regular fortifications, pronounced them to be the lava of extinguished volcanoes. These contradictory opinions induced Mr. Tytler, in the autumn of 1782, to examine the hills in question, and chiefly that called Craig-Phadrick.

From his observations, which appear to be made with great accuracy and care, it seems to be well established, that the structures in question are works of art, made in a remote period of time, to answer the purpose of fortifications. From a variety of circumstances, Mr. Tytler renders it highly probable, that this was a time of extreme barbarism; when the people, scarcely removed from the state of savages, possessed no fixed property in land; their only appropriated goods being their cattle, and their only safe places of retreat, in times of mutual depredation, the tops of hills, nearly inaccessible. Upon these, after rendering the path difficult to an enemy, they constructed such rude fortifications, for the security of their women and children, as their want of art, and the nature of the materials at hand, would admit of. From various observations it is established, that they usually built a double wall on the summit of the mountain. If the neighbouring stone were easily cleft, their walls were firm, and of considerable durability. If, on the contrary, the stones were rounded, irregular, and not easily fashioned, these rude builders must or

necessity have accumulated vast piles of inconsiderable solidity, on account of their ignorance of the use of mortar or any other cement. The most obvious remedy for this defect, which would present itself to men so situated, would be to avail themselves of an internixture of the trunks and branches of trees among their loose stones; and the confined space on which their operations were to be performed, would naturally suggest the raising a double row of palisades, or strong stakes, in the form of the intended structure; in the same way as, in the ancient mode of building, called coffer work. According to this very probable hypothesis, these stakes were warped across by boughs of trees, laid very closely together, and into the intermediate space it may be supposed, that the boughs and trunks of trees, stones of all sizes, and earth, were thrown, and served to form a strong bulwark. Against this defence, a barbarous enemy might exhaust their forces with very little success, unless assisted by fire; and it is reasonable to conclude, that they accordingly availed themselves of that element. The consequence is sufficiently obvious; a large mass of wood and earthy substances set on fire, and perhaps urged by a strong wind, may without difficulty be admitted to acquire a great deal of heat, not inferior to that which produces vitrification in compound stones.

The author adduces many reasons in confirmation of his opinions; and endeavours to ascertain the time in which these rude erections were made. For these and other particulars the reader must have recourse to the paper itself, which is entertaining as well as instructive.

Art. II. Remarks on some Passages of the Sixth Book of the Eneid. By James Beattie, L. L. D. F. R. S. Edin. &c.

This paper is an elegant dissertation on the mythology of the Romans, as poetically described by Virgil, in the Episode of the descent of Eneas into hell; in which Dr. Beattie endeavours to rescue Virgil from what he calls the heavy charges of impiety and ill manners, brought against him by Dr. Warburton, and other classical critics. The doctor, notwithstanding his admiration of the Roman poet, affirms, that 'the groves, plains, and meadows of Elysium, clothed in eternal verdure, abodes of tranquillity and joy, illuminated by a sun and stars of the most resplendent beauty; where were feasting and dancing, and music; poets accompanying their verses with the harmony of the lyre; warlike exercises renewed, in which the heroes while on earth had so much delighted, and horses, and chariots, and arms, and every thing that could gratify a heroic mind;' these he says were very inadequate to the desires and capacity of an immortal soul. This we will readily admit; but on the other hand,

hand, we presume to say, without offence to revelation, that the pictures of a future state, as exhibited by some mystical theologists, do not appear superior, or better calculated to gratify an immortal soul through infinite duration, than these beautiful reveries of the ancients.

To abridge Dr. Beattie's Essay would be to spoil it; we must therefore refer our readers to the paper itself.

Art. III. An Essay on Rythmical Measures. By Walter Young, M. A. F. R. S. Edin. and Minister of the Gospel at Erskine,

This essay contains fifty-six quarto pages, is divided into two parts, and very elaborately analyzes musical and poetical rythmus. The author no doubt will find readers who, like himself, can scan verses and beat time; and who will receive some pleasure from the sagacity with which he explains to them the mechanical associations by which these things are performed: he is certainly a scholar, a musician, and a reasoner; but it is equally certain, that he is no poet, or he would have communicated the essence of all he has said in as many lines as he has written pages. We believe him to be guilty of few, if any mistakes; but neither does he appear to have made any discoveries; consequently to reprint any part of his Essay would be but of little utility.

Art. IV. On certain Analogies observed by the Greeks in the Use of their Letters, and particularly of the Letter ΣΙΓΜΑ. By Andrew Dalzel, M. A. F. R. S. Edin. and Professor of Greek in the University of Edinburgh.

This long dissertation is written according to the fashion of those learned commentators, who carefully avoided expressing the simplest assertions in their own language, so long as their memory could help them to express the same by a quotation. Professor Dalzel has shown at full length, that he understands the Greek Grammar, and has exhibited a great number of authorities to prove what no one will at this day, we apprehend, be disposed to contest. The philosophy of grammar is, we admit, a subject of great value and importance. The construction of language, if well understood, and traced to its origin, bids fair to afford the best analysis of the human understanding. The art of writing or depicting either words or things, by ocular signs, connected by the association of ideas, affords ample scope for enquiry into the nature and tendency of the most wonderful and most extensively useful of all human inventions. In this the discussion of the relative nature and powers of alphabetical and hieroglyphic writing, with their respective advantages and defects, would afford a vast field for discussion and improvement. But none of these could be expected to be treated of in a dissertation

upon a single letter. Curiosity led us to a careful perusal of this paper, as we found it difficult to conjecture, by what means the letter Sigma, could afford matter for fifty-three quarto pages. The curious reader may follow our example if he pleases, as we do not find ourselves qualified to enter into any detail of what we have read.

Art. v. Account of the German Theatre. By Henry Mackenzie, Esq; F. R. S. Edin.

Two collections of plays, translated from the German language, have been published in France; the one entitled *Nouveau Théâtre Allemand*, by Messieurs Friedel and De Bonneville; and the other called *Théâtre Allemand*, by Messieurs Junker and Liebault. To each of these is prefixed an historical dissertation on the rise and progress of the German Theatre; from which dissertations Mr. Mackenzie has extracted the chief part of the account which is here published. He does not pretend himself to understand the German language; and indeed it is evident, that he is unacquainted with it, or he would not have given the names of several German plays in French: this impropriety, he may indeed probably have fallen into, from a desire that his readers might be guided in their search for the plays in the French translations, which works, in the course of his essay, he frequently mentions; but accuracy requires, if such were his intention, that it should have been noticed.

His performance is animated, and sometimes assumes the glow of genius. He appears however to have become enamoured of his subject somewhat unjustifiably, when he more than insinuates the German theatre in general, to be superior to the modern English, which he describes as ‘now sunk to such a state of degradation, as hardly to be worthy of notice.’ Degraded indeed it is, by farces and buffoonery sufficiently contemptible; but so it always has been, in every age, from the days of morris-dancers and mummers, to the present. True dramatic genius is of too high an order to be expected in great abundance; especially in the present state of society, when genius has so many temptations to exert itself in other modes, more to its own advantage, and so many difficulties to encounter from the partialities, the farcical propensities, and the paltry despotism of those by whom the theatres are governed. To pretend, however, that the German theatre, during the whole course of its existence, has ever afforded one comedy equal to the *School for Scandal*, would be absurd. The play of *The Robbers* (we do not know the German title) which Mr. Mackenzie describes with such well founded enthusiasm, we grant, is, even in the French translation, superior in the noblest qualities of a play, however defective and even repre-

reprehensible in its plan, to any tragedy the English have produced since the days of Otway.

Dramatic authors in Germany do not appear to have so many difficulties to encounter as in England; but on the contrary, their stimulatives cannot be so powerful. Their pecuniary rewards, we are informed, are trifling. They have no great national theatre, which prescribes law to the rest: their best pieces have made their first appearance in provincial towns; thus even the meagre tribute paid by applause must be very circumscribed. Their language has yet obtained no fixed standard; each petty principality has its dialect, and taste and elegance are uncertain where or to whom to appeal. The absurd distinctions of rank are destructive of energy. Ostentation, instead of meeting contempt and ridicule, is revered by its ignorant slave; and wit and fancy have but few opportunities of displaying their charms: their efforts are rude, and adapted to the oppressed faculties of feudal slaves, and their ignorant tyrants. That the state of Germany, both theatrical and political, must soon be altered, there can be but little doubt; and the efforts which her poets have already made, are sufficient to encourage us to hope largely from their creative powers hereafter. Lessing, Goethe, Brandes, Klopstock, and Schiller, the young poet who wrote *The Robbers*, are among the most famous of their dramatic poets.

Mr. Mackenzie praises liberally, and with the genuine ardor of sensibility, various of the plays in these collections, for which reason it is somewhat singular, that he should have omitted to mention, the Father of a Family, a serious play written by Baron Gemmingen, the merits of which are certainly great. We imagine this must have been an omission of haste, for we think it scarcely probable that any two men, in the least capable of understanding the piece, should differ in opinion. We can but add, we think his paper well deserving of notice, partly for its contents, but most for the spirit with which it is written. While reading it, however, we could not but remark, how infinitely superior the author of it is, when writing his own thoughts, to what he is when he descends to the humble office of translation, which perhaps of all the tasks which genius can execute for the benefit of mankind, is the most ungrateful.

Art. vi. Theory of the Moods of Verbs. By James Gregory, M. D. F. R. S. Edin. Fellow of the Royal College of Physicians, and Professor of the Theory of Physic in the University of Edinburgh.

This is a very meritorious paper, and highly honourable to the author, as a philosopher as well as a philologist. His view of the subject is enlarged, and incites enquiry, by affording an example of its honourable and beneficial effects. He proves both

both the beauty and the utility derived from those inflexions of verbs, which grammarians call moods, and suggests the probability, that with the growth of knowledge, wisdom, and language, the number of such inflexions will increase. His examples of the effects of the moods in eloquence and poetry are pertinent and convincing; his deductions acute, not tedious, and his philosophic range of thought is liberal and ample. There are points, however, on which we must be allowed to doubt, if not differ from the author. He, for example, disagrees with those philosophers, who suppose the mind is only capable of having a single thought or idea at once; he imagines many thoughts may exist in the mind at the same instant of time, of which he endeavours to give proofs, and says, he knows no proof to the contrary. But, though for instance, the word universe raises a thought (we say thought, for we suppose it to be single) which includes as many thoughts perhaps as any word language can afford, we suspect each must be single and progressive, and we doubt, whether suns, stars, or comets, much less insects, grubs, fish, &c, be ever suggested at the very same instant the word universe is pronounced or recollect. When we speak of a mob, do we recollect the various kinds of persons of whom it is composed; the picture of a mob, whether painted on canvas, or the retina of the eye, we believe to be single in the strictest sense, though in the latter case, it may vary a thousand times, or much oftner, in a second. This question, however, with many others which the author has started, requires more elaborate investigation than can be here given, and justice demands we should say, we deliver our opinion, though believing it to be truth, with diffidence, not having thought sufficiently on the subject to do otherwise.

Art. vii. An Essay on the Character of Hamlet, in Shakespeare's Tragedy of Hamlet. By the Rev. Mr. Thomas Robertson, F. R. S. Edin. and Minister of Dalmeny.

It is but seldom, that criticisms of this kind interest the reader, who comparing the character thus analized with the pleasure received from the exhibition of the character itself, is generally dissatisfied, and often offended by the languor of disquisition. The present essay does not produce this effect, its intention is to rescue a character, which never was beheld without the most lively, and perhaps exquisite emotions, from accusations preferred; indeed, some of them by men of genius, but at moments when the full and whole impression made by the character was not present to the mind, and partial recollection made that appear incongruous, which was in itself beautifully consistent. The effort was worthy of criticism, yet it seems strange, that while defending Hamlet against the immorality of murdering the king in the act of devotion, and thus

thus instead of revenging his father's death, of rewarding a villain, by sending him to heaven, the author, though he perhaps accounts truly for the cause of the delay, should forget a circumstance which critics appear generally to have overlooked, which is, that by taking him in the act of rage, incest, or some one that had no relish of salvation in it, he should send his uncle's soul to hell, he cannot be construed to have meant to send him to eternal torments. Hamlet's father had been

‘Doom'd for a certain time to walk the night,
And for the day confin'd to fast in fires ;
Till the foul crimes done in my days of nature,
Are burnt and purg'd away.’

Hamlet's father had thus been sent to hell ‘to sulph'rous and tormenting flames’ by the uncle, and it would indeed have been no revenge, which, however mistakenly, Hamlet considered as a duty to have sent him to heaven.

Our limits are confined, but there is one passage toward the close of this essay, which we cannot forbear to insert.

‘There is an impression which great accomplishments and splendid talents, independent of every thing else, especially in a tragic cause, never fails to make upon mankind. These shine most powerfully in the character before us ; and probably have contributed much to the charm which has made audiences hang upon Hamlet. The world, for the first time, saw a *man of genius* upon the stage ; and the interest which the spectators have taken, and perhaps for ever will take, receiving an addition from this cause, arises thus upon the whole, from the many different sources which the poet, by a superlative effort of talents and of skill, has combined together.

‘The fault (if any) of the play seems to lie in this, that there is not the usual interest excited in it, for the final event. What Shakespeare's purpose in this respect originally was, cannot be affirmed. It is possible, that, finding the character of Hamlet to grow upon him, he varied in the progress from what he had intended in the outsetting of the play, and giving to Hamlet, on this account, a fuller scope, (but without departing from the character) he eventually threw more interest into the person than into the plot. Whatever may have been the cause, we see the effect. Hamlet, in his sole person, predominating over, and almost eclipsing the whole action of the drama. It is he that draws the admiration ; it is he that engrosses the concern ; all eyes are turned more and more to him ; Hamlet is wished for in every scene ; king and queen, incest and murder, as objects of tragic attention, vanish almost away ; the moment Hamlet's own fate arrives, the play is ended. The interest which the hearts of men take in the principal character of this tragedy, stands thus in competition with the laws of the drama ; and it becomes a problem, which of the two, the means or the end, should preponderate.’

ART. III. *An Essay on Phlogiston and the Constitution of Acids, a new Edition.* By R. Kirwan, Esq. F. R. S. &c: to which are added Notes exhibiting and defending the Antiphlogistic Theory, and annexed to the French Edition of this Work by Mess. de Morveau, Lavoisier, De la Place, Monge, Berthollet, and De Fourcroy. Translated into English. With additional Remarks and Replies by the Author. 8vo. 317 pages. Price 5s. in boards. Johnson. 1789.

As we have already given a very ample account of the French edition of this work*, we shall only observe in this place, that the editor of the present edition, Mr. Nicholson, appears to have bestowed all that attention to accuracy, which a work of this importance is justly entitled to. He has not thought proper to interfere in the controversy. But as his preface not only contains a candid account of the performance, but likewise facts which tend greatly to the general advancement of chemical pursuits, we shall present our readers with an extract in his own words.

‘ In the work before us, the public is presented with most of the facts and deductions relating to a controversy, on a subject of the most extensive importance. The parts of all bodies tend to approach each other, and this tendency would end in absolute repose, if it were not counteracted by some other energies. In the unlimited regions of space, as far as observation can reach, or imaginary conjecture extend itself, we perceive that a force of projection is opposed to that attraction, which would otherwise bring numberless worlds into one immense mass. In our planetary system we find, that the revolutions produced by the composition of the gravitating and projectile forces, cause certain regular changes of heat or temperature on the globe we inhabit, and doubtless on the others which revolve round the sun. The science of chemistry, though confessedly in its infancy, informs us that this heat, or cause of temperature, whatever it may be, is the great opponent to the cohesive attraction, which, if not thus opposed, would prevent every change among the parts of bodies. When heat is communicated to bodies, they assume the various forms of expanded solidity, fluidity, and elasticity. In the two last states, they combine and exhibit those various dispositions to unite or separate, which have been referred to specific attractions, called the chemical affinities. During these processes, the temperatures are changed in consequence of certain effects, which are all referable to the general and wonderful process, known by the name of combustion. It is therefore a leading consideration, and, as it were, the very soul of chemistry, to determine what happens when bodies undergo combustion. Whether such bodies as increase their temperature until their total decomposition, when they are heated with the access of air, do contain any common principle of inflammability; or whether

* See Review, Vol. II. p. 576.

they simply possess a power of combining, strongly and rapidly, with a part of the atmosphere? is the great question agitated in the following sheets, by a philosopher of the first eminence amongst us, who maintains the existence of phlogiston: while the contrary opinion is supported by men whose successful labours, in this department of science, have entitled them to the highest consideration, from all its cultivators, and from every friend to society.

‘ I need not enlarge upon the advantages that must result from the compression of this controversy, into one small volume, by such men; neither need I, nor can I with propriety, make any observations in this place upon their deductions. My own part as translator, has been performed with a degree of diligence and attention, which will be properly valued by those who know that this task, subordinate as it is, requires an intimate knowledge of the subject, and no small care, before the translation can be offered to men of science, as a substitute for the original. This I can venture to do with confidence, and flatter myself that it contains no errors; or, if there be any, that they are very few.

‘ Though I think it proper to avoid any interference in the arguments of the respectable authors of this publication, and have taken that liberty, by adding a note, in one single instance only; yet I shall not scruple to offer a few remarks concerning the limits of error in chemical experiments, with the hope that they will have some effect upon the future researches of such chemists as have not paid sufficient attention to this circumstance.

‘ When chemists reason upon the subjects and products which pass under their observation, they chiefly enquire into their nature and qualities, but take it for granted that the quantities are accurate. In this last particular they would be justifiable, if the quantities of weights were always entered from actual experiments, without reduction or other computation. It happens, however, most commonly, in the determination of weights, which is half the business of a chemist, that on account of the admission of elements of specific gravities carried to too many places of figures, or in consequence of reductions of vulgar fractions to decimals, or sometimes from actual noting of weights to a degree of minuteness which experiment cannot justify, we find the result to exhibit an unwarrantable pretension to accuracy. To counteract this, I must observe, that,

‘ 1. Such beams as have been used by the most accurate operators, and are spoken of as being extraordinarily good, do not, in general, weigh accurately beyond four places of figures*: and consequently, all weights set down to more places, are deceptions either of inadvertence or intention.

* Of these it will be sufficient to mention Muschenbroek's balance; *Cours de Physique*, II. 246: Bolton's two balances; *Philosophical Transactions*, LXVI. 509: Whitehurst's balance, *ibid.* p. 576: Mr. Alchorne's strong balance; *ibid.* LXXVII. 205: Mons. Tillet's balance; *Acad. Par.* 1767, and Mr. Lavoisier's small beam; *Traité Elem. de Chemie*, p. 334.

‘ 2. If we admit of the pretended accuracy of beams, which are said to have weighed to five and six places of figures*; yet they could not be thus used in the ordinary course of experiments, because their motion cannot but be extremely slow: not to mention that the proportional accuracy of all beams is relative to one particular weight or load only, and diminishes if that load be altered either way.’

‘ 3. The error of weighing any elastic fluid is at least thirty times as great in proportion to the whole, as in common weighing: For the glass globe and apparatus made use of, must be extremely light indeed, if it be not thirty times as heavy as the included air. Hence if a beam weighs to five places of figures in common, it will not weigh an elastic fluid to a greater accuracy than three, and an estimate or guess figure. And the error of determining the absolute weights of given quantities of air will be rendered greater by the uncertain allowances for temperature and pressure, and the various quantities of moisture they may contain, according to their manner of reception, and time of exposure to water, which cannot be avoided in experiments on a large scale. For these reasons it may be doubted whether the specific gravities of elastic fluids can, in general, be depended on as far as three places of figures.’

‘ I will not extend this preface, by invidiously pointing out how far these circumstances, obvious as they are, have been overlooked by several experimental philosophers, who deserve and possess a very high degree of estimation. But as a reference to weights, in the experiments of Mr. Lavoisier, is made to constitute a great part of the arguments adduced to prove the composition of water, and its decomposition, I think it proper (highly as I esteem his talents) to take notice that his writings abound with specific gravities of elastic fluids, carried to five places of figures, which are so far from being given as estimate numbers, that they are used as elements in results, carried to six, seven, and even eight places of figures. If it be denied that these results are pretended to be true in the last figures, I must beg leave to observe, that these long rows of figures, which in some instances extend to a thousand times the nicety of experiment, serve only to exhibit a parade which true science has no need of: and more than this, that when the real degree of accuracy in experiments is thus hidden from our contemplation, we are somewhat disposed to doubt whether the exactitude

* Of these I find only Mr. Read’s strong beam; Phil. Trans. LXVI. 511; Dr. Fordyce’s beam, by Ramsden; ibid. LXXVII: Mr. Lavoisier’s strong beam; Traité de Chimie 334: and the Royal Society’s balance by Ramsden. The three first weigh to five, and the last to six places of figures. The point of suspension cannot, even in theory, when at best, move through so large a space as five hundredths of an inch, during the first minute, in this last mentioned balance, though it seems to be, in all respects, the best I have ever seen or heard of.

of the experiments be indeed such as to render the proofs *de l'ordre démonstratif* *.

When we reflect on the grand experiment of the gun-barrel, and consider that it requires the accurate determination of the weight of a gun-barrel of ten or twelve pounds, both before and after the ignition ; of an enormous bulk of inflammable air received over water ; and also of vital air employed in the re-composition ; we cannot help wishing to know the limits of error, and how far they may affect the inferences. This appears to be an object worthy of the attention of the French Academicians. Every friend of science must own his obligations to their instructive labours ; and I should feel no small degree of regret if I supposed the present observations could be attributed to any desire of depreciating their merits, or indeed to any motive but an attachment to truth.

V.

ART. IV. *Reports of the Royal Humane Society : with an Appendix of Miscellaneous Observations on the Subject of suspended Animation.* 8vo. 474 p. Price 5s. in boards. Cadell. 1790.

AMONG the various benevolent establishments which reflect so much honour on this age and country, no one is perhaps more entitled to the thanks of the community at large, than that which is the subject of the publication before us, which owes its existence principally, we believe, to the exertions of Dr. Cogan. The interests of humanity can surely in no instance be more essentially promoted than by an institution whose immediate object is to avert one of the greatest calamities which can affect the happiness of domestic and social life ; nor can the welfare of the state be more effectually secured than by the preservation of the lives of its citizens, and by guarding against those several causes of sudden death to which some of the most useful members of society are constantly exposed ; and it may be added as a peculiar recommendation of this institution, that since the introduction of inoculation, the medical art has in no instance perhaps so materially added to its powers of doing good, as since its attention has been directed by the Humane Society to the means of restoring suspended animation. The history of the society in the reports of the many individuals saved by its interposition from premature deaths, affords the most incontrovertible proofs of its utility, and cannot but be read with the utmost satisfaction by every friend to human nature. The present volume comprehends a period of three years, namely 1787, 1788, and 1789, and exhibits some very extraordinary instances of resuscitation. Most of the cases are written by the medical gentlemen who respectively attended them, and occasional notes are added by the editor, Dr. Hawes, with a view to impress the reader with the most important

* See p. 65 of the original, or 59 of this translation.

circumstances of the several cases, and to illustrate the general principles of this peculiar art. There are likewise inserted extracts from some of the lately published and most approved dissertations on suspended animation, particularly that of Dr. Fothergill, Dr. Goodwyn, and Mr. Kite, and no small part of the volume is occupied with passages of sermons which have been preached to recommend the institution, with extracts from poems, hymns, odes, &c. commendatory of, and allusive to, this establishment, and even with advertisements of the various publications respecting this society, which have appeared in the years 1787, 1788, and 1789.

As the simple history of the society's useful exertions in the cause of humanity, this volume cannot fail to be duly estimated by the public:—but as a literary production we are sorry to observe, that it is very open to animadversion, and from this circumstance we experienced no small degree of mortification in its perusal. In this remark however we would confine ourselves to that part of the work which belongs to the Editor: for the mere cases are certainly not the objects of criticism: the circumstances under which most of them are evidently written, would sufficiently plead an excuse for almost any defect in style and manner which they might contain, but of these we acknowledge we have observed but few: our objection is to the general compilation, or if we may so express it, to the structure of the book; it is indeed most awkwardly put together. A gross affectation of sentiment pervades the whole volume; scraps of poetry and Latin quotations are every where obtruded; the remarks on many of the cases are not only of the most trite and common place kind, but are tiresomely repeated; the terms benevolence, philanthropy, humanity, and similar expressions, are reiterated till they become almost offensive; and above all we are disgusted with the unexampled egotism of the Editor. We respect the doctor, and very highly too, for his exertions in favour of the Humane Society; we give him full credit for possessing the most genuine and patriotic benevolence, but we cannot be blind to a weakness which is so apparent in every thing he writes; and we lament that we should have occasion to remind him, that as charity covereth a multitude of sins, so vanity may obscure a multitude of virtues. P.

ART. V. *Dr. Pultney's Historical and Biographical Sketches of the Progress of Botany in England.*

(Concluded from p. 29.)

OUR learned author begins the second volume of this interesting and accurate work, with the earliest notices of botany in Scotland. With Allan Ogilby, who flourished about 1471, and left a book *De Balneis*, and six books *De Virtutibus Herba-*

rum;

sum; and Dr. James Cargill, of Aberdeen, the correspondent of Caspar Bauhin and Lobel.

‘The founding of the Botanical Garden, and the Museum at Edinburgh, by Sir Andrew Balfour, may be considered as the introduction of Natural History into Scotland. The garden was established about the year 1680; and in 1683, was so successfully cultivated by James Sutherland the intendant, that it is said to have contained 3000 species of plants, disposed according to Morison’s method. An account of it was published under the title of *Hortus Medicus Edinburgensis*. The first attempts towards indigenous botany, were owing to Sir Robert Sibbald, the first medical professor instituted in the University of Edinburgh, about the year 1685. He published *Scotia Illustrata*, 1684 and 1696, folio, &c.’

James Wallace, M. D. published, in 1700, an account of the islands of Orkney, containing a catalogue of some of the indigenous plants of that northern region.

George Preston, superintendant of the Edinburgh garden, published, about the year 1710, a catalogue of the plants which he introduced there.

‘In the year 1716, Charles Alston succeeded Preston.—At the age of 33, (1716) he went over to Leyden, to study under Boerhaave. At that place, he contracted an intimacy with the late celebrated Dr. Alexander Monro; and with him, on their return to Edinburgh, projected the revival of medical lectures, where but little had been done in that department, since the first establishment of the medical professorships 1665, under Sir Robert Sibbald and Dr. Pitcairn. The plan was modelled by that of Leyden. Monro was appointed to give lectures in Anatomy and Surgery; Alston in Botany and the *Materia Medica*. Rutherford, Sinclair, and Plummer, were soon after appointed to fill up the other departments; and to the spirited endeavours of these celebrated names, the University of Edinburgh owes the rise of that reputation which has since so deservedly raised it to be one of the first schools of physic in Europe. Dr. Alston continued to teach Botany, and the *Materia Medica*, to the time of his death in 1760.’

Dr. A. published several works; but the principal was *Tirocinium Botanicum*, the bulk of which is, a professed attempt to explode the system of Linnæus, and particularly to invalidate his arguments for the sexes in plants.

His lectures on the *Materia Medica*, prepared for the press before his decease, were published by his successor Dr. Hope, in 2 vols. 4to. 1770.

‘This work must be considered, as exhibiting rather the state of the *Materia Medica*, as it has been, than as it is, in the works of Lewis, Bergius, Murray, and Cullen.’

Such are the contents of the 27th chapter, which is the first of the 2d volume.

Chap. 28. Dr. Leonard Plukenet, born 1642, a learned, critical, and laborious botanist. He wanted that patronage to which his merit entitled him, and seems to have felt the want severely. Towards the close of his life, however, he is said to have obtained the superintendency of the garden at Hampton-Court, and he was honoured with the title of Royal Professor of Botany. He probably died soon after the year 1705.

His *herbarium* consisted of 8000 plants. Of these the *Phytographia* is to be considered as the delineation of the new and rare kinds; and the *Almagestum*, *Mantissa*, and *Amaltheum*, as the catalogue of the whole.

Of these works, the first was published at different times: the first and second parts in 1691; the third in 1692; and the fourth in 1696. The same year produced his *Almagestum*. The *Mantissa* came out in 1700. Lastly, the *Amaltheum* in 1705. This abounds with new subjects from China and the East-Indies, and with some from Florida.

Plukenet's works contain 2740 figures, mostly engraved from dried specimens, and on a small scale. They form, however, a large store, and no work before, published by one man, ever exhibited so great a number of new plants. They were reprinted in 1769, with the addition of a few plates. Great part of his *Herbarium* came into Sir Hans Sloane's possession, and is now in the British Museum.

Chap. 29. Contemporary with Plukenet was James Petiver, apothecary to the Charter-house, and dwelling in Aldergate-street. He seems to have been the only one, after the Tradescants, excepting Mr. Courten and Dr. Sloane, who made any considerable collection in natural history.—Petiver was so successful in his efforts, that Sir Hans Sloane, who afterwards purchased it, offered Petiver 4000l. for his Museum.

He published *Musei Petiviriani centuria decem*, 1692—1703, 8vo.

Gazophylacii naturæ & artis decades decem, 1702, folio, with 100 plates of rare animals, vegetables and fossils.

Plantæ rariores Chinenses, &c. in the 3d vol. of Mr. Ray's history.

A catalogue of plants found on the mountains about Geneva, &c. 1709, without his name.

Pterigraphia Americana, 1712, folio, 20 plates, 16 of ferns, and 4 of submarine productions.

A catalogue of Mr. Ray's English Herbal, illustrated with figures, fol. 1713, with 50 plates; continued to 72 plates, in 1715. There are 12 plants on each plate. A new impression of these was made under the inspection of Sir Hans Sloane in 1732.

His smaller publications were too many to enumerate.

Mr.

Mr. Petiver died on the 20th of April, 1718.—His works, exclusive of his papers in the *Philosophical Transactions*, were collected and published in 1764, in two volumes folio, and one octavo; with the addition of some plates.

Chap. 30. To introduce father Plumier, who being a Frenchman, had otherwise nothing to do with biographical sketches of botany in *England*, Dr. Pulteney has given us the rise and progress of the custom of giving personal names to plants, and observes, that Plumier was very liberal in this respect to Englishmen.

Chap. 31. Banister, Vernon, Kreig, Cunningham, Samuel, and Alexander Brown, Glen. The *herbariums* of the three first are in the British Museum. Cunningham is supposed to be the first English writer, who gives an accurate history of the tea-tree.

Chap. 32, 33. ‘At the same period of time, lived Ray, Morison, Plukenet, Petiver, Sloane and Sherard, under whose countenance and culture, the knowledge of nature received the most rapid and substantial improvement, which it had ever experienced. In this period, system had been revived and improved by Morison, Ray, Herman, Tournefort, and Rivinus. In this period also, Rhede, Rumphius, Plumier, and Sloane, published those great works in exotic botany, which have immortalized their names. This period was the close of the last century; which, as it has been called by the elegant and learned author of the ‘*Essay on the Genius and Writings of Pope*,’ the golden age of learning in England; so has Linnæus named it, in his allegorical history of the rise and progress of this science—the golden age of Botany; and Sloane was one of its brightest ornaments.’

Dr. P. has given the outlines of Sir Hans Sloane’s life; but that, and his works, are so well known, that it is unnecessary for us to dwell upon them, farther than to say, that he was born in 1660—that he went into France, and there attended Tournefort—that at his return to London in 1684, he became the favourite of the famous Sydenham—that in 1684 he was elected a Fellow of the Royal Society, and in 1687, entered into the College of Physicians—that in 1687, he went to Jamaica, as physician to the Duke of Albemarle, and staid there only fifteen months—that on his return to London, he soon became eminent; was chosen secretary to the Royal Society in 1693, and physician to Christ’s Hospital in 1694—that in 1701, he was incorporated doctor of physic at Oxford—that he was elected a foreign member of the Royal Academy of Sciences at Paris in 1708—that he was created a Baronet by King George I. physician general to the army, physician to King George II. that he enjoyed the confidence of Queen Caroline, and prescribed for the royal family till his death;—

that in 1719, he was elected President of the College of Physicians; and on the death of Sir Isaac Newton in 1727, President of the Royal Society; resigning the first of these in 1733, and the second in 1740: soon after which he removed his library and museum to Chelsea, where he passed the twelve latter years of his life in retirement, and died Jan. 11, 1752.

‘ Possessed of affluence, entirely the reward of his own merit, Sir Hans Sloane enjoyed, through a long life, every satisfaction that science could bestow; and, in the British Museum, has not only erected the noblest monument to his own fame, but a temple also to the culture of learning and of science, which will transmit his donation to future ages, as a signal instance of the munificence of a private individual.’

Sir Hans’s great work was entitled ‘ A Voyage to the Islands Madeira, Barbadoes, Nevis, St. Christopher’s, and Jamaica,’ in two volumes, folio; the first published in 1707, the second not till 1725. The plates in both are 274: the number of plants described 800. In the introduction to the second volume, is an inventory of his library and museum as it then stood.

Chap. 34. The institution of the Royal Society, and its influence in promoting natural history.—The botanic garden at Chelsea, founded by the Company of Apothecaries in 1673, its endowment by Sloane, and list of the demonstrators from that time, viz. Rand, Joseph Miller, Wilmer, Hudson, Alchorne, and Curtis.

Archibald, Duke of Argyle, one of the first who was conspicuous for the introduction of foreign trees and shrubs. Mr. Evelyn encouraged the same taste. The royal garden at Hampton-Court was rich in fine plants, and that at St. James’s was of no inconsiderable note. The Dukes of Beaufort had a garden richly stored at Badminton, in Gloucestershire. Dr. Henry Compton, Bishop of London, had another at Fulham. He had a real and scientific knowledge of plants; he collected a greater variety of green-house rarities, and planted a greater variety of hardy exotic trees and shrubs, than had been seen in any garden before in England. This repository was ever open to the inspection of the curious and scientific.

Samuel Doody. Great praise due to him for discoveries in indigenous botany, particularly in the *Cryptogamia* class. He died in 1706.

Chap. 35. Edward Llwyd, a celebrated antiquary and naturalist, born 1670; student of Jesus College, Oxford, in 1687, under Dr. Plot, on whose resignation he was appointed keeper of the Ashmolean Museum about 1690. His publications are *Lithophylacii Britannici Ichnographia*, 1699, 8vo, or a methodical catalogue of the figured fossils in the Ashmole Museum. As only 120 copies were printed, a new edition

of it was published in 1760, by Mr. Huddesford. *Catalogus Librorum MSS. in Museo Ashmoleano*, without date.—*Archæologia Britannica*, folio, 1707.

Thomas Lawson enlarged the English Flora by great discoveries of plants in the north. To him we owe the botanical part of Robinson's 'Essay on the Natural History of Westmoreland and Cumberland:' but he never published any thing himself.

Tancred Robinson, M. D. a correspondent and great friend of Mr. Ray's, whom he assisted very much in his history and synopsis.

Matthew Dodsworth, mentioned by Ray and Plukenet, as well acquainted with English Botany.

Chap. 36. Samuel Dale, of Braintree, in Essex, the friend and neighbour of Mr. Ray. He died 1739, in the 80th year of his age. He published *Pharmacologia*, 1693, 8vo. printed several times afterwards. The edition of 1737, 4to. is much improved and enlarged.—'The Antiquities of Harwich and Dover Court, 1730, 4to.'

Chap. 37. Richard Bradley, a popular writer on gardening and agriculture; one of the first, who treated these subjects in a philosophical manner, and possessed of considerable botanical knowledge. Chosen Professor of Botany at Cambridge 1724. He was author of more than twenty publications, between 1716 and 1730. His *Historia Plantarum Succulentarum*, published in decades between 1716 and 1727, and re-published in 1734, is the most esteemed of his works.—He died in 1732.

Dr. Patrick Blair, a native of Scotland, practised physic at Dundee, removed to London, and settled finally at Boston in Lincolnshire, where he died about 1728, or soon after.—He published 'Miscellaneous Observations,' 1718, 8vo.—'Botanick Essays,' 1720, 8vo. The first complete work, at least in the English language, on the sexes of plants.—*Pharmacobotanologia*, 1723, 4to. 'On the British indigenous and Garden Plants of the New Dispensatory.' This work was alphabetical, and carried no farther than letter H.

Chap. 38. William Sherard, born 1659, entered at St. John's college, Oxford, 1677, became fellow there, and took the degree of L.L.B. in 1683. He accompanied Lord Viscount Townshend in his travels, and afterwards Wriothesley Duke of Bedford; returning about 1693. He formed connexions abroad with Herman, Boerhaave, and Tournefort: and travelled to various parts of England, Jersey, &c.

He is said to have been the author of a book published under the name of Samuel Wharton, entitled, *Schola Botanica*, &c. Amst. 1689. 12mo. reprinted 1691 and 1699. It contains a rude sketch of Tournefort's method.—He also published Herman's

man's *Paradisus Batavus*. Lugd. Bat. 1698. 4to. In 1702, he was one of the commissioners for sick and wounded seamen at Portsmouth; and was soon after appointed consul at Smyrna. At a country house near this place he spent his summers, cultivated his garden, and began his famous *Herbarium*, which is said finally to have contained 12,000 species. He returned into England in 1718; and soon after had the degree of Doctor of Laws conferred upon him by the university of Oxford.

In 1721 he made the tour of Holland, France and Italy: in conjunction with Boerhaave he published Vaillant's *Botanicon Parisiense*, in 1727; and on his return brought with him the celebrated Dillenius.

He died August 12, 1728; and, by his will, gave 3000l. to provide a salary for a professor of botany at Oxford, on condition that Dr. Dillenius should be chosen first professor. He erected the edifice at the entrance of the garden for the use of the professor; and gave to this establishment his botanical library, his *Herbarium* and the *Pinax*, containing the joint labours of himself and Dillenius.—Five volumes in folio, containing Dr. Sherard's literary correspondence, were presented to the Royal Society by Mr. Ellis, in the year 1766.

James, the brother of William Sherard, was born in 1666. He was an apothecary in London, and becoming opulent, cultivated at his country seat at Eltham, in Kent, one of the richest gardens that England ever possessed; immortalized by the pen of Dillenius.

Chap. 39. John Jacob Dillenius was born at Darmstadt, in Germany, in the year 1687, and educated principally at Giessen, a city of Upper Hesse. He was early a member of the *Academia Curiosum Germaniae*, and communicated several papers to that society, which were published in their *Miscellanea Curiosa*. In 1719 he published his 'Catalogue of Plants growing in the Neighbourhood of Giessen.' In 1724 he published a third edition of Ray's *Synopsis*. On the death of Sherard, in 1728, he was made professor of botany at Oxford. In 1732 he published that elegant and elaborate work, the *Hortus Elthamensis*: in which 417 plants are drawn and etched with his own hand. He arranged and ascertained Dr. Shaw's Oriental Plants; and pursued his History of Mofles with great diligence. This invaluable work was published from the Sheldon press in 1741; and the numerous subjects, contained in 85 plates, were drawn and engraved by his own hand. He died on the 2d of April, 1747.

Chap. 41. Dr. Richardson, educated a physician; lived at North Bierley, in Yorkshire, on his own estate; travelled into various parts of England and Wales; and had a garden well stored with plants. He lived in intimacy and correspondence with Sloane, Dillenius, &c. published nothing separately, but was

was author of several papers in the *Philosophical Transactions*: his name also appears to the preface in the third edition of Ray's *Synopsis*. He died, at an advanced age, about 1740.

Samuel Brewer, of Trowbridge, in Wilts, attended Dillenius into Wales, &c. in 1726. He wintered in Wales, to collect plants of the *Cryptogamia* class. In 1728 he went to reside at Bradford, in Yorkshire; where he died after 1742.

Thomas Harrison, a tradesman at Manchester, furnished Dillenius with specimens for his history. His *Herbarium* is deposited in the Manchester library.

Thomas Cole, another of Dillenius's correspondents, a dissenting minister at Gloucester, in a flight of religious zeal is said to have burnt an *Herbarium* which he had collected.

Chap. 42. Rise of Botany in Ireland.—Gerard Boate, a Dutch physician, began Ireland's natural history; published by Hartlib, 1652, 12mo.—Silliard, an apothecary at Dublin, is mentioned by Parkinson: but the earliest intelligence of any real botanist is Mr. Heaton, a divine, whose name is attached, as the first discoverer, to many plants in How's *Phytologia*, and to some in Merrett's *Pinax*. He is thought to have left a m. s. on the subject, which is conjectured to have been written about 1641; Threlkeld took the Irish names of plants from it. Towards the end of the same century, some information was received relating to the natural history of Ireland, from the tour of Dr. Llhwyd, and from Sherard's visits to Sir Arthur Rawdon at Moyra.

Soon after this time, the establishment of the *Philosophical Society* at Dublin contributed to advance natural history; and of those who exerted themselves to promote these pursuits, were the two brothers, Dr. William and Dr. Thomas Molyneux.

Caleb Threlkeld, author of the first treatise on the plants of Ireland, was born in 1676, at Keiberg, in the parish of Kirkoswald, in Cumberland. In 1698 he commenced M. A. at Glasgow, and soon after settled near the place of his birth as a dissenting minister. In 1712 he took the degree of M. D. at Edinburgh, and removed to Dublin, where he had success in the practice of physic, and died in 1728. He published *Synopsis Stirpium Hibernicarum*, 1727, 8vo. It does not contain more than 535 species.

John Keogh, B. A. published *Botanologia Universalis Hibernica*. Corke, 1735. 4to.

In the 'County Histories of Ireland,' published under the direction of the Physico-historical Society of Dublin by Charles Smith, we meet with catalogues of the rare plants in each district.

Chap. 43. John Martyn, born 1699; read lectures on botany in London, 1725 and 1726; admitted F. R. S. 1727; read lectures in botany and the *materia medica*, both at Cambridge

bridge and London in 1730 and 1731, and in 1733 was elected Professor of Botany at Cambridge. He resigned his chair in 1761, and died in 1768. He published *Tabulæ Synopticae Plantarum Officinalium*, 1726, fol.—*Methodus Plantarum circa Cantabrigiam nascentium*, 1727, 12mo.—*Historiæ Plantarum Rariorum Decades quinque*, 1728—1732, fol. The most sumptuous and magnificent work of the kind that had then ever been attempted in England.—‘The first Lecture of a Course of Botany,’ 1729, 8vo.—‘Tournefort’s History of Plants about Paris,’ translated and accommodated to the Plants of Britain, 1732, 2 vols. 8vo.—And many papers in the Philosophical Transactions; several volumes of which he abridged, first with Mr. Eames, and afterwards alone. He also, with Mr. Chambers, translated and abridged the philosophical papers from the Memoirs of the Royal Academy of Sciences at Paris—wrote several lives in the General Dictionary—translated Boerhaave’s Treatise on the Powers of Medicine; and Harris’s on the acute Diseases of Infants. But he is perhaps best known to the learned world by his edition of the Georgics and Bucolics of Virgil.

Chap. 44. Mark Catesby, born 1679, went to Virginia in 1712, and staid there seven years. His communications from thence gained him the patronage of Sherard, and on his return to England, he was encouraged to return to America. In May, 1722, he arrived in Carolina, examined the country about Charles-Town, tojourned among the Indians about Fort Moore, extended his researches through Georgia and Florida, and having spent nearly three years on the continent, visited the Bahama Islands. On his return to England in 1726, he made himself master of the art of etching; and retiring to Hoxton, employed himself on his great work, which he published in numbers of 20 plates each. The first appeared in 1730; the first volume, with 100 plates, was finished in 1732; the second, in 1743; and the appendix, of 20 plates, in 1748. The whole work is entitled, ‘The Natural History of Carolina, Florida, and the Bahama Islands:’ and is the most splendid that England had ever produced:—72 plates were copied by the Nuremberg artists, and published in 1750; and his ‘Observations on Carolina,’ &c. were printed there in 1767. His great work was republished in 1754 and 1771; to the latter a Linnaean index is annexed. Mr. Catesby died in London December 23, 1749.

Chap. 45. William Houston enriched our exotic botany, and sent over the seeds of many rare and new plants, collected by him in the islands of Jamaica and Cuba; in the province of Venezuela, and about Vera Cruz. He fell a sacrifice to the heat of the climate, and died in July, 1733. A ms. catalogue of plants which he left behind him, with some engravings

by

by his own hand, were given to the public by Sir Joseph Banks, under the title of *Reliquiae Houtonianæ*. 1781. 4to.

James Douglas, M. D. F. R. S. Physician to Queen Caroline, published ' *Lilium Sarniensis*; or a Description of the Guernsey Lily: to which is added, The Botanical Dissection of the Coffee-berry,' 1725, fol.—Also, in the Philosophical Transactions, ' A Botanical Description of Saffron, with the Culture,' &c.—' An Account of the different Kinds of Ipecacuanha,' and other papers.

Chap. 46. Increasing cultivation of exotics from the beginning of the present century. English gardeners—Fairchild, well known for his experiments on the motion of the sap, and on the sexes of plants. He died Nov. 1729.—Knowlton, gardener to Consul Sherard, and in 1728 to the Earl of Burlington at Lonesborough in Yorkshire. His zeal for English botany was uncommonly great, and he was not inattentive to the pursuits of the antiquary. He died in 1782, aged 90. James Gordon of Mile-end, was eminent for his successful cultivation of exotics, and well acquainted with English botany.

Philip Miller was born in 1691. He succeeded his father as gardener to the Company of Apothecaries at Chelsea, in 1722, and resigned his office a little time before his decease, which took place Dec. 18, 1771.

' He raised himself by his merit, from a state of obscurity, to a degree of eminence but rarely, if ever before equalled, in the character of a gardener.—He was admitted a member of the Botanical Academy of Florence, and of the Royal Society of London, in which he was occasionally honoured by being chosen of the council. Mr. Miller was the only person I ever knew, who remembered to have seen Mr. Ray. I shall not easily forget the pleasure that enlightened his countenance, it so strongly expressed the *Virgilium tatum vidi*, when, in speaking of that revered man, he related to me that incident of his youth.'

He left a large *Herbarium* of exotics, and published ' A Catalogue of Trees, Shrubs, and Flowers, propagated in the gardens near London,' 1730, folio, with twenty one coloured plates. This was without his name.—*Catalogus Plantarum Officinalium quæ in horto botanico Chelseano aluntur.* 1730. 8vo.—' The Gardener's Dictionary, fol. 1731.' (8vo. 1724, &c.) It has passed through many editions, has been translated into various languages, and the reception it has met with, is a sufficient proof of its superiority.—In the same, or succeeding year, he published ' The Gardener's Kalendar,' in 8vo, which has also run through numerous editions:—to that of 1761 he prefixed ' A short Introduction to the Knowledge of the Science of Botany.'—' Figures of Plants:' which he began to publish in numbers in 1755, and completed in 300 plates, making two volumes, in 1760.—' The method of cultivating

cultivating Madder.' 1758. 4to.—and several papers in the Philosophical Transactions.

Chap. 47. 'It is a singular fact, that physic is indebted for the most complete set of figures of the medicinal plants, to the genius and industry of a lady, exerted on an occasion that redounded highly to her praise.—The name of Mrs. Elizabeth Blackwell is well known, both from her own merit, and the fate of her unfortunate husband, who, condemned for crimes of state, suffered death on the scaffold in Sweden, in 1747.'

To relieve him from prison, into which some years before, he had been thrown for debt, Mrs. B. having a genius for drawing and painting, had projected the publication of—'A curious Herbal, containing 500 cuts of the most useful plants in the practice of physic,' &c. 1739, 2 vols. fol.—and at Nuremberg, by Trew and others, with additions, in 1773.

Charles Deering, of Saxony, came to England about 1720. He practised physic in London, and in 1736 removed to Nottingham, where he published a catalogue of plants growing thereabouts, 1738. 8vo. His knowledge in the Cryptogamia class was very considerable.—Oppressed with calamity and disease he died April 12, 1749.—A posthumous work of his was published by his administrators, under the title of *Nottinghamia vetus & nova*. 1751. 4to. with 24 plates.

John Wilson, author of 'A Synopsis of British Plants.' 1744, 8vo.—He died about 1750.

Chap. 48. John Blackstone, an apothecary in London, published *Fasciculus Plantarum circa Harefield sponte nascentium*. 1737. 12mo.—and *Specimen Botanicum*. 1746. 8vo. exhibiting the places of growth of 366 species of the more rare English plants.—He died in 1753.

Peter Collinson: in his time England received large accessions to exotic botany, to which no one contributed more than himself. He died 1768, in the 75th year of his age.

Numerous were the channels by which England was enriched with American plants; and several ingenious gentlemen there pursued botanical investigations with great success about this period.—James Logan, Esq; instituted a set of experiments on the Maiz, relating to the sexes of plants, which are appealed to, as among the most decisive in establishing that doctrine.—Dr. John Mitchell, then resident in Virginia, sent over, in 1741, descriptions of thirty genera of plants, of which six were entirely new. Two years after he sent an ingenious 'Essay on the Causes of the different Colour of People in different Climates.' About 1747 or 1748, he returned to England, and became a Fellow of the Royal Society, in whose Transactions his Essay, and a memoir on the Preparation and Uses of Pot-ash, &c. are printed.

Richard Warner, Esq; of Woodford Row in Essex, maintained there a botanical garden.

• The

The herbarizations of the Company of Apothecaries were, once in the season, usually directed to the environs of Woodford, where, after the researches of the day, at the table of Mr. Warner, the products of Flora were displayed. The result of their investigations, was published by Mr. Warner, under the title of *Plantæ Woodsfordienses*. Lond. 1771. 8vo. He died April 11, 1775.

Chap. 49. Among the various contingencies which favoured the introduction of the Linnæan system into England, it is not unimportant to mention the effect of the admirable pencil of the late G. D. Ehret. This ingenious artist brought with him, not only a general taste for botany, but a particular knowledge of the principles, on which the system of Linnæus was founded; and was among the first who displayed it, in the specimens of his art.

He was first taken up by Dr. Trew, and from Nuremberg went to Basle, Montpelier, Lyons, Paris, and London. Linnæus found him in Mr. Clifford's garden in 1736, and his botanical accuracy was first manifested in the figures of the *Hortus Clifforianus*, 1737. He returned to England about 1740, and painted for Taylor White, Esq; Dr. Mead, and others. The plants published in Trew's *Plantæ Selectæ* were by his hand: as were those in Browne's *Jamaica*. He also drew and engraved 15 plates of exotics, published from 1748 to 1759.—He died in September 1770, in the 60th year of his age.

Chap. 50, 51. The learned author dedicates two copious chapters to the account of the late very respectable Sir William Watson. It would take up too much of our room to give them even in an abridged state; and his character lives in the memory of so many learned persons, that it seems not very necessary.

Chap. 52. The concluding chapter of this work gives an account of Linnæus's visit to England in the year 1736; of his writings being diffused about 1740; and of his system being taught in the publick lectures at Cambridge and Edinburgh, and finally established among us, about twenty years after. The full reception of it was also much accelerated by the arrival of the late much-lamented Dr. Solander in 1760; and the new modelling of English Botany according to the rules of the Linnæan school by Mr. Hudson, in 1762.

We have been the more full in our analysis of this excellent work of Dr. Pulteney's, because it is a first attempt of the kind, executed by the hand of a master.

M. T.

ART. VI. *The Life of Voltaire, by the Marquis de Condorcet.*
To which are added, Memoirs of Voltaire, written by Himself.
Translated from the French. In Two Volumes small 8vo.
935 p. Pr. 8s. sewed. Robinsons. 1790.

THERE is not a writer of the present century, perhaps, of whom the public have heard so much as of Voltaire. Friends have been

been lavish of their encomiums, and enemies of their abuse. The numerous disciples of infidelity have extolled that name to the skies, which Christians of every denomination seldom hear, but with an instinctive shock of abhorrence, or disgust: while those who can separate the man from his works, view with rational admiration that versatility of talents, which could adapt itself to every branch of polite literature, with almost equal success.

The literary labours of seventy years must necessarily claim the public attention, even if they had not been devoted to such popular and important subjects as engaged the pen of Voltaire; and though not distinguished by that brilliancy of fancy, correctness of taste, and elegant familiarity of style, which were almost peculiar to himself. Accordingly, the press has teemed with memoirs, anecdotes, lives and letters occasionally, for these ten years past.

The marquis de Condorcet brings little, or nothing new to the general stock of information; but retails what we have read before, more than once, in a variety of forms. Many of the anecdotes given in the Memoirs, said to have been written by himself, (but of which, by the bye, there has never been any satisfactory proof) are repeated in the former part of this work. The account of his residence at Berlin with the late king of Prussia, the literary squabbles between him and Maupertuis, the adventure at Frankfort, and the stale, but ridiculous story of Freitag, who demanded "the work of *Poëbys* of the king his master;" are twice repeated in these volumes, though they were all so well known before.

But it is clearly evident, that novelty of information relative to Voltaire, was not the author's motive in publishing his life. He has made it a convenient vehicle for publishing his own religious and political sentiments, which, we fear, will be thought by many more licentious and extravagant than those of his great original. Not content to correct the errors and expose the superstitions of a fraudulent and corrupt system; not disposed to separate Christianity from the mass of folly and corruption, which the vice and ignorance of ages have heaped on it, our author would destroy every form of religion, and break the tie which connects the human soul with the Deity: but he might as well attempt to extirpate from our bosoms the passions of hope and fear. Besides, it is not by arrogating to himself the post of eminence, and looking down on the rest of his fellow-creatures with contempt, that the philosopher will make men wiser or better. Insolence is not the language of instruction; and of all other subjects, religion should be the least connected with the vanities of self-love, and the haughty boast of superior wisdom.

The

The marquis de Condorcet cannot mention, or allude to a priest, but as a hypocrite, or fanatic; nor think of religion, but as bigotry, superstition, or fraud. Men who are as conscious of their disinterested sincerity, as he can possibly be of his exclusive power to pronounce the oracles of truth, cannot hear these opprobrious epithets without some degree of indignation: but were they to retort them, what would ensue, but mutual hostilities, and an infringement of that toleration and forbearance, which every good man wishes to promote.

It is, indeed, the peculiar delusion of every narrow-minded sect to suppose, that all mankind will, or ought to embrace their tenets; and we never saw this more fully exemplified than in the sentiments of our author. Voltaire, one should imagine, appeared at a time when all Europe was ripe for improvement, and exercised uncontrollable dominion over the minds of men: for hear the account which is given of the wonderful effects of his writings. VOL. I. p. 308.

‘These works, rigorously prohibited in France, in Italy, at Vienna, in Portugal, and in Spain, could not be speedily circulated; all of them could not reach every reader; but there was not an obscure corner in the provinces, there was not any nation in foreign countries, suffering under the yoke of intolerance, which did not feel the influence of some of these writings.

‘Men of liberal minds, who existed before only in some cities where science was cultivated, or among the learned and the great, were, by his voice, multiplied in all classes of society as well as in all countries. Soon perceiving their number and their strength they ventured to shew themselves, and EUROPE was astonished to find itself a country of DEISTS!!’

So credulous is vanity, and so true is the maxim, “*Quod volumnus facile credimus.*”

In the violent invectives which we find against Christianity, the author forgets, that there may be a species of fanatic philosophy, and a degree of bigotry, or wild enthusiasm in politics, as dangerous as ignorance, and as corrupt as tyranny. Liberty, with many, seems only a specious term for the power of treating others as we please; and toleration sometimes means indulgence and protection received, not given; or, at least, confined to our own sect and party. What can we think of the man, who, in the same pages where he expresses his abhorrence of superstition, hypocrisy, and intolerance; where he speaks with rapture of liberality, freedom of thinking, and “the mild, consolatory virtues *,” would feel no remorse, as it should seem, to extirpate, to drive into deserts, or persecute with all the fury of a crusader, a whole race of people, and that the most numerous, perhaps, on the face of the earth. p. 389.

* Vol. I. p. 472.

Men

• Men have declaimed against the injustice of a war against the Turks: can we be unjust toward a hoard [horde] of robbers, who hold a people in slavery, and whose avidious ferocity overwhelms these people with outrages? Let them return to those deserts which the imbecility of Europe permitted them to quit, since, in their brutal pride, they have continued to produce a race of tyrants! At length, let the country of those to whom we owe our knowledge, our arts, and even our virtues, cease to be dishonoured by the presence of a people who unite the despicable vices of effeminacy to the ferocity of savages!

The author is indebted for this particular notice rather to our sense of duty, as good citizens, than to the importance of his work, or the abilities with which it is written: for we cannot flatter him so far as to say, that we think it will do Christianity any harm, or the cause of infidelity much good.

The remarks on Voltaire's works are in the most extravagant style of childish and indiscriminate admiration. If we may credit the marquis de Condorcet, there never was such a poet, whether we consider his *Henriade*, his tragedies, or his lighter pieces; there never was so learned, so accurate and profound an historian, nor so admirable a philosopher. The review of his general character consists of such preposterous praise as this.—‘ The history of whatever has been done in Europe, in favour of reason and humanity, is the history of his labours and beneficent acts.’ (p. 457.)

We shall now lay before our readers a few extracts, observing that some passages are written with a degree of elegance and animation, that would have been much more pleasing, if not disgraced by a haughty pride, that borders on insolence, and a species of literary tyranny, which we beg leave to call the bigotry of philosophy, and the intolerance of authorism. The following is the history of the well-known poem of *La Pucelle*, or the Maid of Orleans, with our author's justification of its moral tendency. p. 226.

‘ The repose of Voltaire was soon disturbed by the publication of the Maid of Orleans. This poem, in which licentiousness and philosophy are combined, and truth assumes the mask of satiric and voluptuous humour, was begun about the year 1730, but had never been finished. The author had intrusted what he had written of it only to a few of his friends, and to some princes. The rumour of its existence had brought down menace on him; and, by not finishing it, he took the surest means to avoid the dangerous temptation of making it public. Copies unfortunately got abroad, one of which fell into inimical and selfish hands, and the work appeared not only with such defects as the author had left, but with lines added by the editors full of grossness and ill taste, and with satiric traits which might endanger the safety of Voltaire. The desire of gain, the pleasure of attributing their own wretched verses to a great poet, and the more malignant pleasure of exposing him to persecution, were the motives of this act of infidelity, the honour

honour of which was divided between la Beaumelle and the Ex Capuchin Maubert.

'They succeeded only so far as to trouble that repose for a moment which they wished to destroy. His friends evaded the persecution, by proving the work to be spurious, and the hatred of the editors served him whom it meant to wound.

'This, however, obliged Voltaire to finish the poem, and present a work to the world, at which the author of Mahomet and the Age of Louis XIV. need not blush. The work excited lively feelings of enthusiasm in a numerous class of readers, while the foes of Voltaire affected to decry it as unworthy of a philosopher, and almost as a blemish on the writings and the life of a poet.

'But, if it be useful to render superstition ridiculous in the eyes of men addicted to voluptuousness, and by the very weakness which hurries them into dissipation destined some time to become the unfortunate victims or the dangerous tools of this vile tyrant of men, if affectation of austerity of manners, if the excessive value attached to their purity, be serviceable only to hypocrites, who, wearing the mask of chastity, may neglect every other virtue, and cast a sacred veil over the most pernicious vices of society, such as intolerance and persecution, if accustoming the world to regard those errors from which men of honour and conscience are not exempt as crimes, the power of that dangerous sect, who govern and disturb the world, be extended over the purest minds, by their having exclusively rendered themselves the interpreters of celestial justice, we shall then only behold in the author of the Maid of Orleans the foe of hypocrisy and superstition.

'Voltaire himself, when speaking of La Fontaine, has well remarked, that works, in which voluptuousness and humour are mingled, amuse without heating or seducing the imagination. And if such works be sources of pleasure to the fancy, which lighten the uneasy moments of life, diminish the misfortunes of privation, unbend a mind fatigued by labour, and fill up moments in which the weary and sunken soul can neither act nor meditate with effect, wherefore rob men of an aid which nature presents? What will be the effect of such reading? No other than that of disposing men to more mildness and indulgence.'

The anecdote respecting a libel from the pen of the abbé Desfontaines will shew how far the empire of *Superstition* may be extended. p. 122.

'In vain had Voltaire imagined that the retreat of Cirey would hide him from hatred; he had concealed his person only, his fame still offended his enemies. A libel, which was a malignant attack on his whole life, appeared to the disturbance of his repose. He was treated like a prince, or a minister, because he excited equal envy. The abbé Desfontaines, who was indebted to Voltaire for liberty, and perhaps for life, was the author of this libel. Accused of a shameful vice, which *superstition* has classed among *crimes*, he had been imprisoned at a time when, from atrocious and ridiculous policy, it was thought proper to burn a few men, in order to make another man conceive disgust for this vice, to which they falsely supposed him inclined.'

The

The account of Voltaire's last moments, perhaps, will be interesting to some of our readers. p. 430.

* The arrival of Voltaire at Paris had rekindled the fury of the fanatics, and wounded the pride of the chiefs of the hierarchy; but it had also inspired some priests with an idea of building their reputation and their fortune on the conversion of this illustrious enemy. Certainly, they could not flatter themselves with the hope of subduing him, but they did not despair of inducing him to dissemble. Voltaire, who wished to remain at Paris without being tormented by sacerdotal accusations, and who, from a habit acquired in his youth, thought it beneficial to the interests even of the friends of reason, that certain scenes of intolerance should not succeed his last moments, had sent in the beginning of his malady for an almoner of the incurables, and who had boasted of having restored to the bosom of the church the abbé de L'Attaignant, known by offences of another kind.

* The abbé Gauthier confessed Voltaire, and received a profession of faith from him, by which he declared that he died in the catholic religion, in which he was born.

* When this circumstance was known, which offended enlightened men rather more than it edified the devotees, the curate of Saint Sulpice ran to his parishioner, who received him with politeness, and gave him according to usage a handsome offering for his poor people. But, mortified that the abbé Gauthier had anticipated him, he discovered that the almoner of the incurables had been too easily satisfied with his penitent, and that he ought to have required a more particular profession of faith, and an express disavowal of all the doctrines, contrary to orthodoxy, which Voltaire had been accused of maintaining. The abbé Gauthier pretended that, by requiring every thing, all would have been lost. During this dispute, Voltaire recovered, Irene was played, and the conversion was forgotten. But, in the moment of the relapse, the curate returned to Voltaire, absolutely resolved not to inter him, if he could not obtain the desired recantation of his errors.

* This curate was among those men who are a mixture of hypocrisy and imbecility; he spoke with the obstinate persuasion of a maniac, and acted with the flexibility of a Jesuit; he was humble in his manners even to baseness, arrogant in his sacerdotal pretensions, fawning with the great, and charitable to the populace, who are governed by the priests that distribute alms to them, and, in fine, he harrassed the simple citizens, by his imperious fanaticism. He earnestly wished to compel Voltaire at least to acknowledge the divine nature of Jesus Christ; to which he was more attached than to any other dogma. He, one day, drew Voltaire from his lethargy, by shouting in his ear: 'Do you believe the Divinity of Jesus Christ?' — 'In the name of God, sir,' replied Voltaire, 'speak to me no more of that man; but let me die in peace.'

The second Volume contains what our author calls 'Pièces Justificatives; ' these consist chiefly of letters, in which we find some acts of liberality to booksellers recorded, and some instances of pecuniary assistance to friends in distress.

The

The following letter from J. J. Rousseau is valuable ; and we trust will be acceptable to our readers. VOL. II. p. 115.

September 10, 1755.

‘ In every respect, sir, it is my duty to express my gratitude to you ; and, while I offered the rude outlines of my sorrowful reveries, I thought not of making a present worthy of you, but of acquitting myself of an obligation by rendering the homage which we all owe to you as our chief. Sensible, beside, of the honour which you do my country, I participate in the gratitude of my fellow-citizens, and hope that it will augment in proportion to the profit they may derive from your precepts. Embellish the asylum you have chosen, enlighten a people worthy of your lessons, and do you, who so well know how to display liberty and virtue, teach us to cultivate them in our actions as we adore them in your writings. All who approach you ought to learn from you the road to glory and immortality.

‘ You see, sir, I do not aspire to the reputation of once more leading men into the woods ; not but that I regret my part of the loss of a state of nature. With respect to yourself, sir, to make you a savage would be a miracle so great that it can be wrought only by God, and so pernicious that it can be willed only by the devil. Do not therefore attempt to walk on all-fours ; to do which no man on earth is less qualified. You teach men too effectually to stand firmly not to remain erect yourself. I own the disgrace which attends on celebrated men of letters is great indeed, nor do I deny that the evils are numerous which are attached to human nature, and which appear to be independent of our vain knowledge. Men have opened so many sources of misery to themselves that their happiness is but little increased when they chance to escape a single misfortune. There are secret connections, however, in the progress of things which are unperceived by the vulgar, but which do not escape the thoughtful eye of the philosopher.

‘ It was neither Terence, Cicero, Virgil, Seneca, nor Tacitus, who caused the crimes of the Romans and the misfortunes of Rome. But without the slow and secret poison which insensibly corrupted the most vigorous government of which history has preserved the remembrance, Cicero, Lucretius, Sallust, and such men had never existed, or they had never written. The amiable age of Lælius and Terence insensibly introduced the brilliant period of Horace and Augustus ; and, in fine, the horrid epoch of Seneca and Nero, that of Tacitus and Domitian. A taste for the arts and sciences has its birth in a secret vice, which it soon augments in its turn ; and if it be true, that all human acquirements are pernicious to the species, those of the mind and of knowledge, which increase our pride and multiply our wanderings, will soonest accelerate mens' misfortunes. Yet, there necessarily comes a time in which those acquirements are requisite to stay the progress of evil : it is the steel which must remain in the wound, lest, in removing it, the wounded should expire.

‘ As to myself, had I pursued my first vocation, and neither read nor written, I should have been unquestionably more happy ; yet

yet if letters could now be entirely effaced, I should be deprived of the only pleasure which is left me. It is in letters that I find a consolation for all my misfortunes; it is among their illustrious children that I taste the delights of friendship, and learn to enjoy life and despise death. To them I owe the little merit I have, and to them am I also indebted for the honour of being known to you. But let us consult interest in our concerns, and truth in our writings. Although there need philosophers, historians, and truly learned men to enlighten the world, and conduct its blind inhabitants, yet, if the wise Memnon has not misinformed me, I know nothing more ridiculous than a nation of sages. Confess, sir, fit be right that great minds should instruct men, the vulgar ought to receive their precepts. If each takes upon himself to give instruction, where will those be who are to receive it? The lame, says Montaigne, are ill calculated for bodily exercise, or decrepid souls for the exercises of the mind. Nevertheless, in this learned age, we see none but the lame willing to teach others to walk.

* Ordinary men receive the writings of the learned to criticise them, and not to instruct themselves. Never has the world swarmed with such dwarfs in intellect; they croud the theatre, the coffee-houses resound with their sentences, the booksellers stalls are covered with their writings, and I hear the *Orphan* criticised, because it is applauded, by a school-boy so little capable of perceiving its defects that scarcely can he feel any of its beauties.

* Let us look for the first source of all the disorders in society, and we shall find that the miseries of mankind proceed from error rather than ignorance; and that what we do not know is much less prejudicial to us than that which we think we understand. Now what surer means to run from error to error than the rage of knowing every thing? Had not men pretended to know that the earth does not turn on its axis, they had not punished Galileo, for having affirmed that it did turn. If none but philosophers had claimed the title of philosopher, the *Encyclopédie* had experienced no persecution. If a hundred despicable beings had not aspired to fame, you would have been left to the peaceful enjoyment of your's, or at least you would have had to contend with none but adversaries worthy of you. Be not surprised then should you feel some thorns which are inseparable from the flowers that adorn superior talents. The calumnies of your enemies are the followers of your triumph; as formerly satyric acclamations were those of the Roman generals. It is the public eagerness for your writings which produces the thefts of which you complain; but the assimilating them with others is not easy, for neither iron nor lead unites with gold.

* Permit me, in consideration of the interest which I take in your repose and our instruction, to advise you to disdain vain clamours, by which it is less the design to make you do ill than to divert you from producing good. The more you shall be criticised, the more must you be admired; and a work of genius is a terrifying answer to weak reproaches. Who will dare to attribute books to you, which you have not written, while you continue to produce inimitable works?

* I am

‘ I am proud of your invitation; and if this winter leaves me so circumstanced that I can visit my native country in spring, I will avail myself of your goodness. But I would rather drink the water of your fountain, than the milk of your cows; and with respect to the herbs of your orchard, I much fear to find nothing there but the *lotos*, which is only pasture for beasts, or the *moli*, which prevents men from becoming brutes. I am sincerely and respectfully, &c.

J. J. ROUSSEAU, Citizen of Geneva.’

The Memoirs annexed to this volume are the same as were published in the year 1784, and translated, we believe, by Mr. Holcroft.

The translation, upon the whole, possesses elegance and spirit: but we noticed some Gallicisms, such as,—‘ wearied by being made the receptacle of the opinions of the others *.’—This formerly *so* dangerous weapon †:’ and—‘ from among these *so* famous men ‡.’ There are also some instances of false grammar, as—‘ the experience of three ages are necessary:’—and many mistakes in orthography; such as, *bigottry*, *melancholly*, *neice*, *viel*, *interresting*, *attrocious*, *prefered*, &c. These, whether arising from carelessness, or ignorance, are equally reprehensible.

F.

ART. VII. *Bell's New Pantheon; or Historical Dictionary of the Gods, Demi Gods, Heroes, and Fabulous Personages of Antiquity: also, of the Images and Idols adored in the Pagan World; together with their Temples, Priests, Altars, Oracles, Fasts, Festivals, Games, &c. As well as Descriptions of their Figures, Representations, and Symbols, collected from Statues, Pictures, Coins, and other Remains of the Ancients. The whole designed to facilitate the Study of Mythology, History, Poetry, Painting, Statuary, Medals, &c. &c. and compiled from the best Authorities. Richly embellished with characteristic Prints.* In Two Volumes, Royal Quarto. 808 Pages, and 100 Plates. Price 2l. 2s. in boards. Bell. 1790.

THE general usefulness of a work like this no one will dispute, and the form of dictionary is of all others best suited to its nature. Its contents appear to have been collected from the most authentic sources, and no similar compilation in any other language, can perhaps be said to excel it in copiousness and variety. Uniformity of style will not be expected in a promiscuous assemblage of dissimilar articles; erudition sufficient to find, taste to select, and industry to shape materials, are the requisites of a compiler: of these the Pantheon exhibits numerous instances, whilst at the same time, we cannot help observing, that some of its articles are drawn up in a

* Vol. I. p. 102.

† P. 337.

‡ Vol. II. p. 2.

careless, insufficient, and confused manner. Those of *Adonia* and *Antinous* may serve as specimens of both.

* P. 11. ADONIA, solemn feasts in honour of Venus, and in memory of her beloved Adonis. The Adonia were observed with great solemnity by most nations. Greeks, Phœnicians, Lycians, Syrians, Egyptians, &c. From Syria they are supposed to have passed into India. The prophet Ezekiel is understood to speak of them. They were still observed at Alexandria in the time of St. Cyril, and at Antioch in that of Julian the apostate, whose arrival there during the solemnity was taken for an ill omen. The Adonia lasted two days, on the first of which certain images of Venus and Adonis were carried with all the pomp and ceremonies practised at funerals; the women wept, rent their hair, beat their breasts, &c. imitating the cries and lamentations of Venus for the death of her paramour. This rite called *Adonacu*, the Syrians were not contented with observing so far as respected the weeping, but also gave themselves discipline, shaved their heads, &c.—Among the Egyptians the queen herself used to bear the image of Adonis in procession. The women carried along with them shells filled with earth, in which grew several sorts of herbs, especially lettuces, in memory of Adonis having been laid out by Venus upon a bed of lettuce. These were called *κήποι*, or gardens; whence *Adonos κήποι*, are proverbially applied to things unfruitful, or fading; because those herbs were only sown so long before the festival as to sprout forth and be green at that time, and then were presently thrown into the water. The flutes used upon this day were called *Γιγγίαι*, from *Γιγγίας*, which was the Phœnician name of Adonis. This sacrifice was termed *καθίδες*, probably because the days of mourning used to be called by that name. The following day was spent in every expression of mirth and joy, in memory of Venus's having obtained the favour of Proserpina, that Adonis should return to life, and live with her one half of the year. According to Meursius, the two offices of mourning and rejoicing, made two distinct feasts, which were held at different times of the year, the one six months after the other, Adonis being supposed to pass half the year with Proserpina, and the other half with Venus. St. Cyril mentions an extraordinary ceremony practised by the Alexandrians: a letter was written to the women of Byblos, to inform them that Adonis was found again: this letter was thrown into the sea, which, it was pretended, failed not to convey it to Byblos in seven days, upon receipt of which the Byblian women ceased their mourning, sung his praises, and made rejoicings as if he were restored to life. The Egyptian Adonia are said by some, to have been held in memory of the death of Osiris; by others, of his sickness and recovery. Bishop Patrick dates their origin from the slaughter of the first born under Moses. The Adonia were otherwise called Salambo.

* ANTINOUS, one of the suitors of Penelope, whom Ulysses killed at a feast of the other Antinous, (who was deified by Adrian, and to whose memory the *Antinæia* were instituted); there remains at Mandragone a Colossal head, in the most perfect

fect preservation, and conceived on the great principles of art, so exquisite in its beauty, that, excepting the Apollo Belvidere and the Laocoön, scarce any work of antiquity, transmitted to our times, can bear to be compared with it. If permission could be obtained to take a cast from it, our artists might study it as a model of beauty. Independant of the lineaments of the countenance, the details have uncommon merit, and the hair in particular is treated in a manner that no remains of ancient art can equal. In respect to the gems of Antinous, one of the most beautiful extant, and which was in the cabinet of the Zanetti of Venice, is now in the collection of the duke of Marlborough.'

The first of these articles informs us, though not perhaps in a manner the most concise, of all we wish to know concerning a celebrated rite of antiquity: the second, not only jumbles together two separate characters, but gravely informs us, that the Homeric Antinous was slain by Ulysses at a feast instituted in honour of the Bythinian favourite, who lived and was deified by Adrian about fourteen hundred years afterwards.

The word *Diamastigosis* furnishes the following curious and entertaining article.

‘DIAMASTIGOSIS, an ancient solemnity at Sparta, in honour of Diana Orthia, so called *από τε μαστίγης*, from whipping, because it was usual to whip boys at the altar of the goddess. These boys were originally free-born Spartans, but in after times the children of slaves. They were called *βαρυνεῖαι*, from the exercise they underwent at the altar, which was severe and cruel; and lest the officer, out of compassion, should remit any thing of its rigour, the priestess of Diana stood by during the ceremony, holding in her hand the image of the goddess, which naturally was very light, and easy to be born, but, if the boys were spared, became so ponderous, that the priestess could scarcely sustain its weight. Lest the boys should faint under the infliction, their parents were usually present, to encourage them to receive the discipline with patience. Historians inform us that the bravery and resolution of the boys was so great on this occasion, that though they were lashed till the blood rushed forth, and sometimes to death, yet they never uttered the least cry, groan, or complaint. Those who died under this religious whipping, were buried with garlands on their heads, in token of joy and victory, and were honoured with a public funeral. From what origin this custom had its rise, is not agreed by the ancients. Some affirm it to have been instituted by Lycurgus, and designed to habituate their youth to pain, and render them fearless and insensible of wounds. Others pretend it was practised in compliance with an oracle, which commanded that human blood should be shed upon Diana's altar. By some it is reported to have been as ancient as Orestes, who transplanted it from Scythia into Laconia, with the image of Diana Taurica, to whom the Scythians offered human sacrifices. The Lacedemonians detested this barbarous rite, but, fearing the anger of the goddess should they wholly relinquish it, they enacted that a boy, every year, should be whipped at her altar, till the blood

sprung from him. Others relate that Pausanias, the Spartan general, as he was offering sacrifices and prayers before the fight with Mardonius, was set upon by a company of Lydians, whom he repelled with whips and staves, the only weapons the Lacedemonians were then furnished with; and that this solemnity was instituted to commemorate the fact.'

After these extracts the following observations will not be deemed either captious or useless.

The compilers sometimes pretend to furnish hints to the artist: thus in the article *Auræ* 'the vernal airs' of Milton are personified for his use; in Milton the *airs* and *Pan* and the *graces* and the *hours* can be only metaphors, and an attempt to introduce them as figures into the paradise of Adam would have been subversive of his plan. In the description of the *Bacchæ* we are told that 'their grace resembles the airs of Corregio's heads.' But granting that the *Bambino* at Parma has something resembling the peculiar cast of features which the ancients called 'Simus,' is this to be extended to the grace of his females?

In order to make his book useful, the compiler of a dictionary for artists, ought carefully to avoid whatever may tend to perplex, perhaps to mislead the student: had this been attended to, the rhapsodies of *Winkelmann*, and the pert surmises of *Spence* would not have been crammed into so many articles. The simple expression of the Medicean Venus would not have been perverted to a compound of 'aversion, compliance and coquetry,' or the *Laocoön* subdivided into the hero, the father, and the sufferer: we should not have been told that the Apollo remained serene whilst indignation and contempt burst from his features; or that the lover of Omphale was a mere 'old woman with a long beard.' Such observations can only proceed from a race of pedant critics, who, too dull to penetrate the real expression of characters and features, substitute in its place their own abortive conceits.

The article of Hercules repeats after *Winkelmann*, 'that no information has been handed down to us of Glycon, the supposed author of that heroic figure, formerly in the Cortile of the *Farnese*. The German critic unaccountably forgot the *Inviati Membra Glyconis* of Horace.'

We could have wished that in some of the articles relative to the heroes of Homer more attention had been paid to his characteristics and mythology. Thus the distinctives given in the *Ilias* to *Ajax* the *Locrian* might have been mentioned*: *Eurytus* the *Oechalian*, according to the *Odyssey*, is slain by Apollo in a contest of archery, and the murder of *Iphitus* his son is

* Μαρ. ὀλυμπ. παρθένος. *Ilias* x.

reserved for *Hercules* †; *Glaucus* is not killed by *Ajax* in the *Ilias*; the engagement of *Nestor* with the *Molianides* ought to have been noticed, ‡ &c. &c.

Under the title *Jason* we miss the legend of the single sandal, and Pindar's sublime picture of his appearance before *Pelias*. The statue commonly called a *Cincinnatus*, is probably a *Jason*.

In the description of *Homer's Apotheosis* in the Colonna palace, Poverty is said to bring the sacred fire—it should be, Poetry.

Of the plates, neither the merit nor the authenticity are equal. Some, particularly those by *Condé*, deserve commendation. The *Jupiter*, the *Antinous*, the *Hercules* are deformed. The *Mars*, the *Neptune*, the *Tityus*, are modern. The *Atlas* is a figure on a vase in the *Villa Albani*. Of some the explanation is false. The figure of the *Meleager* in the *Vatican*, is called a *Mercury*; *Pan* teaching *Olympus* is turned into *Pan* and *Apollo*; and a group representing *Proteus*, slain on the *Trojan* shore, is transformed to ghosts landing from the boat of *Charon*.

Less attention has been paid to orthography of names and correctness of spelling in general, than might have been expected in a work so expensive and so elaborate. In the inscriptions we find frequent mistakes, such as *Perospi* for *Verospi*, *Capital* for *Capitol*, *Massinis* for *Massimi*, *Pisenius* for *Piscennius*, *Iside* for *Isis*, *Barbarini* for *Barberini*, &c.

These observations are made rather to serve as hints to the editor in a future edition, than to depreciate a work, in its plan so eminently useful, and on the whole, considering its variety, so well executed. Mr. Bell deserves the thanks of the artist and the man of taste.

R. R.

ART. VIII. *Reflections on the Revolution in France, and on the Proceedings in certain Societies in London relative to that Event. In a Letter intended to have been sent to a Gentleman in Paris.* By the Right Honourable Edmund Burke. 8vo. 356 pages. Price 5s. sewed. Dodsley. 1790.

WHEN a great political revolution takes place in an enlightened period of society, the discussion of the principles on which it is conducted is not the least of the advantages which ensue. The nature of civil liberty, and the rights of subjects and citizens, are now better understood than they were before the unfortunate American war, and we have little doubt but that the controversy which will follow on the subject now before us, will reflect additional light on the principles of government; will afford the patriots of France an opportunity of correcting some errors in their government, which might otherwise have escaped their observation; and will afford a useful lesson to others who may find it necessary, for the sake

† *Odys. viii. xxii.*

‡ *Ilias xi.*

of their country and of mankind, to engage in undertakings equally hazardous, equally important.

As the public expectation has been considerably excited by the work before us, and as the subject itself is of the utmost importance, we profess to have bestowed upon it uncommon attention; and in reviewing it we shall adopt that arrangement which appears best calculated to give our readers a just idea of its contents and its merits. We shall first exhibit as clear an analysis as we are able of the work in general; we shall then offer a few remarks on the doctrines which it is intended to establish; as a specimen of the execution we shall select such extracts as appear most deserving of notice, and shall conclude with a few remarks on the style and composition.

Mr. Burke, on this occasion, has adopted the epistolary form, and addresses his reflexions to a French gentleman, who had requested his sentiments on the revolution. The first pages of the work are employed on an account of the Constitutional and Revolution Societies, the importance of which Mr. Burke believes to have been unreasonably magnified on the continent. With respect to the first, the Society for Constitutional Information, our author ironically represents it as a *charitable* institution, intended to circulate, at the expence of the members, certain books, which few persons would be at the expence of buying; of its publications he speaks in terms of unqualified contempt. The Revolution Society Mr. Burke admits to be of much more ancient standing than the former; and traces it to a custom maintained by a club of Dissenters of assembling on every anniversary of the Revolution, to hear a sermon at one of their churches, and afterwards spending the day cheerfully at a tavern. Of late years however, he finds that some politicians of a different stamp have been introduced among them, with what views he is ignorant; but he conceives that for all their importance they are indebted to their correspondence with the National Assembly. Mr. Burke professes himself to be utterly unconnected with both these associations.

From this topic our author is naturally diverted to the sermon which was preached by Dr. Price before one of these societies, which he compares with one preached in 1648 by the famous Hugh Peters, in the highest style of enthusiastic democracy. With much shrewdness and sarcastic ability he attacks Dr. P. on one of his leading principles, *that all who dislike every existing form of religion, ought to set up a separate worship for themselves.*—This Mr. Burke calls an improvement on non-conformity, and observes that Dr. Price's 'zeal is of a curious character. It is not for the propagation of his own opinions, but of any opinions. Not for the diffusion

fusion of truth, but for the spreading of contradiction.' The next position which he contends is, that his present Majesty 'is the only lawful King in the world, because the only one who owes his crown to the choice of his people.' In opposition to this Mr. Burke quotes a variety of statutes to prove that the Crown of England is really hereditary, and that the hereditary succession was only departed from on a particular emergency. He denies that the subjects of England are by their constitution invested with any such rights as Dr. Price supposes to be inherent in the people, viz. 'To chuse their own governors; to cashier them for misconduct; or to frame a new government for themselves.' To shew that no such rights were acquired by the revolution in 1688, he quotes the 'Declaration of Rights,' the Act of Settlement &c; both of which it must be confessed, contain the strongest expressions in favour of the hereditary succession according to certain limitations. Upon the same principles he contends and condemns the doctor's definition of the king, as the *servant* of his *people*; and maintains that the revolution in England, instead of intending innovation or alteration of government, 'was made to preserve our *antient* indisputable laws and liberties, and that *antient* constitution of government which is our only security for law and liberty.' In the following pages our author contends that the liberties of Englishmen are not grounded upon any claim of natural and abstract rights, but upon established custom and law; and asserts further, that this idea of a *liberal descent*, is a much better and firmer foundation for our liberties than that which has been lately chosen by the French assembly. France, Mr. Burke thinks, might have improved her *antient* constitution without subverting it, and by these means might have avoided those violences and disorders, which he attributes to this change.

These disorders Mr. Burke ascribes, in the most unqualified terms, to the gross ignorance of the persons who were chosen to legislate for France. The great majority of the *tiers etat* (which was equal to both the other orders in the Assembly of the States) he asserts was composed of inferior, unlearned, and merely mechanical practitioners of the law; and he describes the whole assembly as chiefly consisting of the dregs of the nobility, of obscure curates, country attorneys, and country *clowns*, 'many of whom are said not to be able to read and write.' With this he compares the British House of Commons, as consisting of every thing illustrious in rank and opulence, and yet not possessed of an hundredth part of the power of the National Assembly. The next point which Mr. Burke contends, is a position of the chancellor of France, that 'all occupations are honourable,' he contends earnestly for the dignity and honour which he thinks are the almost insepar-

inseparable concomitants of rank and property, and infers that an assembly constituted as he has described it, was not likely to act with any liberality or wisdom.

Mr. Burke is a strenuous defender of our constitution in all its parts, and even of our unequal representation, which he alledges 'has answered all the purposes for which a representation of the people can be desired or devised.' Though he does not deny in theory the *real rights* of men, yet he gives it as an axiom, that 'government is not made in virtue of natural rights, but is a contrivance of human wisdom to provide for human wants,' among which he reckons the want of a sufficient restraint on the passions. He therefore observes, that it is with infinite caution that any man ought to venture upon pulling down an edifice, which has answered in any tolerable degree for ages, the common purposes of Society. Theories of government he treats with contempt; and condemns revolutions in general, because 'they temper and harden the breast, in order to prepare it for the desperate strokes which are sometimes used in extreme occasions.' On this occasion he notices in severe terms Dr. Price's triumph over the fall of a monarch; and describes what he esteems the horrors of the 6th of October with much passion, and the most extravagant encomiums on the king and queen of France. The times of chivalry, or the feudal times, are next a subject of our author's admiration, to the spirit of which he thinks we are indebted for all the humanity, learning, and refinement we possess.

Our author next endeavours to refute the sentiment of those 'who give it out in France, that what is doing there is after the example of England.' He opposes to the prevalent atheism of France, the religious sentiments of this nation. He defends its religious establishment. He condemns democracy both in church and state. He remarks that we have, to avoid the evils of inconstancy and versatility, consecrated the state, that no man should approach to look into defects or corruptions but with due caution. We have also consecrated, in the same spirit, the church establishment, and will never suffer the fixed estate of the church to be converted into a pension; to depend on the treasury; and to be delayed, withheld, or extinguished by fiscal difficulties.—'The people of England, he adds, tremble for their liberty from the influence of a clergy, dependent on the crown; they tremble for the public tranquility from the disorders of a factious clergy, if it were made to depend on any other than the crown. They therefore made their church, like their king and their nobility, independent.' Our author next enlarges on the little influence which the teachers of religion are likely to have if needy and dependent; and takes occasion to load with reproaches

proaches the National Assembly for confiscating the property of men (the clergy) unaccused, unheard, untried, &c. He allows that they have made some allowance to their victims from the scraps that fall from their own tables; but adds, that 'to drive men from independence to live upon alms, is itself great cruelty.' He ridicules the covering this outrage on the rights of property with the pretext of a regard to *national faith*. The claim of a citizen he considers as prior in time, paramount in title, and superior in equity to that of the creditor of the state: and 'no acts of the old government, he observes, are held valid in the National Assembly, except its pecuniary engagements; acts of all others of the most ambiguous legality.'

The agents of these extraordinary transactions Mr. Burke supposes to be, 1st. The *monied interest*, which, from the accumulated debt of France, had insensibly grown great, and was extremely jealous of the old nobility: they struck therefore at the nobility thro' the crown and the church. United with these were the *men of letters*, who from the time of Lewis XIV, had been undeservedly and imprudently neglected, and who therefore were desirous of a change of government. 'Writers (he observes) especially when they act in a body, and with one direction, have great influence on the public mind.' The alliance therefore of these with the monied interest, was sufficient in time to raise the public indignation against the superior orders, and particularly against the opulent ecclesiastics.

From this topic Mr. B. reverts to the injustice of falling upon the property of the church. If, he asks, the public estate was not a sufficient stake for the public debt, and that a loss must be incurred somewhere, who ought to be the sufferer? Certainly either the party who trusted, or the party who persuaded him to trust, or both; and not a third party who had no concern with the transaction. 'Why (adds he) is not the estate of Mr. Laborde declared forfeited, rather than that of the archbishop of Paris?' He remarks, that the ministers who were the instruments of these improvident debts, have escaped without any forfeiture—the estates of the family of Choiseul, D'Aiguillon, and Noailles, are quite untouched. After all, however, our author seems disposed to conclude, on the authority of Mr. Neckar, that no violent measures whatever were required, but that the public debts might have been liquidated by a fair, moderate, and proportioned assessment on the citizens.

The ill policy of this measure is next examined.—Mr. B. thinks, that bringing this unwieldy mass of landed property at once into market, must inevitably depreciate the value of these lands, and of all the landed property in France; and that the paper currency, the basis of which is this confiscation, must have the worst effects.

Our author is strenuously of opinion, that there was no necessity for subverting the ancient government, but that on the contrary, it had nothing in it radically evil, though some parts wanted a reform. To prove that the old government was not radically bad, Mr. B. instances the increasing population, and the increasing wealth of the country a few years back; and observes, that under the new government, both the population and the wealth of France are on the decline. He next vindicates the nobility and the clergy, from the aspersions cast upon them.—From their instructions to their representatives he concludes, that the nobility were friends to liberty. He admits, indeed, that the old nobility kept too punctiliose separate from the new families, and the military appointments were too exclusively reserved for men of family; but these distinctions would soon have been removed, by a permanent and popular legislature. The clergy, he observes, are iniquitously punished for the errors and persecutions of their predecessors; he then takes occasion, from personal knowledge, to pay a very handsome tribute of respect to the modern clergy of France; and foretels, from the present arrangements, the extinction of science and erudition in the Gallican church. He condemns in forcible terms, and with forcible arguments, popular elections of the clergy, which he argues, 'will drive out of the clerical profession, all men of sobriety, all who pretend to independence in their function or their conduct.' Even the abolition of monasteries is a subject of censure with our author.—He enlarges on the cruelty of forcing a set of men from a mode of life, which habit and education had endeared to them. He intimates, that a wise legislature might have turned to a useful purpose, the abilities and devotion of 50,000 persons thus educated. With respect to the indolence and inutility of Monks, Mr. B. esteems them to be full as useful as many other classes of society, as usefully employed as those who sing upon the stage, or, as if they 'worked from dawn to dark in the innumerable servile, degrading, unseemly, unmanly, and often unwholesome and pestiferous occupations, to which by the social œconomy, so many wretches are inevitably doomed.'—Such persons, (adds he) 'I should be infinitely more inclined forcibly to rescue from their miserable industry, than violently to disturb the tranquil repose of monastic quietude.' With regard to the estates possessed by bishops, &c. Mr. B. sees no reason, why some landed estates may not be held otherwise than by inheritance.—No excess, he allows, is good; too much landed property ought not therefore to be held officially for life, but he sees no material injury to a commonwealth, if there exist some estates which stand a chance of being acquired otherwise than by money.

Mr.

Mr. B. next takes a review of the conduct and arrangements of the National Assembly, which he considers as 'nothing else than a voluntary association of men, who have availed themselves of circumstances, to seize upon the power of the state.' He denies that they possess any legislative wisdom. He blames, in the first place, their rashness and haste in forming their constitution, and then examines that constitution under the several heads of legislature, executive power, judicature, army, and finance. With respect to the first, he ridicules the square and geometrical distribution of the kingdom, for the purpose of ascertaining the proportion of their representatives; the absurdity, he thinks, is heightened by mixing with this arrangement, another which regards property, viz. the qualifications of candidates and electors, and proportioning, in some measure, the number of deputies to the sum contributed by the district to the public expences.—Both these arrangements, he thinks, must throw the balance too much in favour of Paris and the trading towns, which exceed the country in both population and taxes; and moreover he apprehends, that the division must necessarily tend to sever the country into a number of independent and jarring republics. Their manner of chusing their representatives also, viz. by electing the electors, he considers as destroying the connexion between the representative and his primary constituent, and annihilating the responsibility of the former. He is then led to consider, what materials of cement the legislators had provided to unite this divided people.—Their enthusiasm and civic feasts can but have a very impermanent effect.—As to the paper currency, it must of necessity produce gambling and speculation to a very pernicious extent;—and as to the superiority of the city of Paris, he considers it as impermanent, and likely, by the jealousy it excites, to accelerate ruin.

With respect to the executive power, he blames them for chusing a degraded king, (who must be ever regretful of his former greatness) to be their executive machine.—He is not the fountain of justice.—He appoints not the judges, and has no power of pardoning.—He has no means of rewarding services by grants or pensions. The ministers are the only persons excluded the great council of the nation—and foreign states, Mr. B. thinks, will not seriously treat with a prince, who has no power of making peace or war.—Such an inefficient government, he observes, is not worth the *grease of its wheels.*

As to the judicature, our author blames the abolition of the parliaments. The administrative bodies, he observes, are improperly exempted from the cognizance of the new tribunals. But above all, the appointment of local judges, to be elected for a short period by the people, he thinks utterly destructive

destructive of the purity, independence, and integrity of judicial proceedings.

The army he apprehends to be ill constituted, and refers as a proof to the representation of M. Tour du Pin, of the late excesses in that department. Nor does he apprehend the navy to be better formed. The military appointments are to be by the king, with a reserve of approbation by the national assembly; this Mr. B. apprehends will induce the officers to intrigue with that body, and may be productive of faction. Armies, he observes, have always yielded a very precarious obedience to any senate or popular authority, and some popular general may, by withdrawing their obedience, produce a revolution. As the mode of popular election is established among the municipal soldiers, and exists in all the other departments of the state, he thinks it probable, that the troops of the state may claim the same indulgence. The constitution indeed of the municipal army, is a fresh object of Mr. B.'s censure. He considers it as a mere democratic body, unconnected with the crown or the kingdom, 'a monster that can hardly fail to terminate its perplexed movements in some great national calamity.'

On the topic of revenue, Mr. B. quotes the report of M. Vernier, to prove that the national revenue is diminished eight millions sterling per ann. since the revolution. He blames them for annihilating the salt duties. The voluntary benevolences he ridicules, as 'a tax by which luxury, avarice, and selfishness were screened, and the load thrown upon productive capital, upon integrity, generosity, and public spirit—a tax of regulation upon virtue.' He is not of opinion, that the public expences have been lessened on the whole, by the arrangements of the assembly. From this subject our author reverts to the *Land Bank*, which is formed by the confiscation of church lands. He observes, that previous to issuing the *assignats*, the gross value of the estate ought to be ascertained, as well as the incumbrances with which it is chargeable, in order that a judgment might be formed of the amount to which it might be mortgaged. He notices the immense, but insufficient sum of paper money issued in the beginning of this year, to the amount of sixteen millions sterling—and the frauds to which this business is liable—and concludes, that all that has been done in this department, is a fresh instance of incapacity in the assembly.

Thus we have endeavoured to exhibit a full and impartial account of this celebrated publication. In the same spirit of candour we shall indulge ourselves in a few remarks on the doctrines and principles which it is intended to establish.—Where we testify our dissent from the ingenious author, we shall do it with modesty: where we approve we shall do it with pleasure.

1. It is obvious, that one of Mr. Burke's leading principles is, that it is wiser and better to ground our claim to liberty, and a free and equal government on prescription, local custom, or what he calls *inheritance*, than on the abstract principles of truth and reason, as 'the rights of men.' This we confess appears to us a monstrous and extraordinary doctrine—a doctrine which places an effectual bar to all progressive improvement, immerses the human mind in all the darkness of the darkest ages; and even saps the foundation of those very franchises which are admitted and claimed by Mr. Burke himself. On what principle, we would ask, were these franchises originally grounded; on what, but on the simple dictate of common sense, the maxim 'that government was instituted for the *good* of the governed?' In this maxim we have a plain and general criterion, which cannot be affected by the sophistry of lawyers, or fallacious disputes on ancient precedents and customs. If, moreover, we consider the state of government in the early periods of society, we are apprehensive, that whatever of justice and liberty is now claimed by the subject, may, on Mr. B.'s principles, be ultimately considered as innovations.—*Magna Charta* was certainly an innovation.—The Petition of Rights was an innovation.—The abolition of the Feudal Tenures was an innovation.—Nor can Mr. B. himself deny, that the glorious revolution in 1688, was a complete innovation. On these occasions to what principles did men resort? Certainly they could resort only to those great abstract principles of truth and justice, which are worth all the confused legal speculations that ever disgraced the sophistry of the bar. See p. 47, 48, &c.

2. We cannot, as cool and dispassionate persons, subscribe to Mr. Burke's extravagant idolatry of ancestry and rank. He seems to intimate, that a person of ignoble birth, intruding himself into a legislative station, commits an usurpation on the *prerogatives of nature*, and that in lowering certain individuals, (the nobles we presume) the French have lowered the *dignity and importance of the state*. To the present legislators of France, Mr. Burke proudly opposes the Guises, the Condés, the Colignis, and the Richlieus.—We would only wish to know, what service these *great* men rendered to mankind? Or whether the 'taylors and carpenters of Paris,' are not better citizens, if they prove instrumental in rescuing their fellow-creatures from oppression and injustice? We know of no rule for judging of men but by their conduct. Mr. Burke may tell us of 'every thing illustrious in rank, in descent, in hereditary and acquired opulence; and of men of liberal professions not being 'habituated to sentiments of dignity.'—But we can see no reason why lawyers, and curates, may not prove as able legislators as dissipated men of family, who have *lavished*

vished their patrimony in the most profligate pursuits ; and we are confirmed in this sentiment (by a fact which indeed is immediately contrary to another of our author's assertions) that is, that we fear *men of family* are in general very far from being the best educated persons in any nation. Whether it proceeds from the weakness of his cause, or from any other circumstance, it is impossible for us to ascertain ; but it is remarkable, that Mr. Burke's only argument against the abolition of the nobility in France is, ' that he does not like to see *any thing destroyed*, any void produced in society.' See p. 59, 63, 64, 70, 71, 72, 74, 76, 77.

3. We cannot agree with Mr. Burke, in approving any thing that favours of *party*, or of *faction*, in a state. ' To be attached to the *subdivision*, to love the little platoon we belong to in society, is the first principle (the germ as it were) of public affections.' It was such attachments as these, that so frequently kindled the flames of civil discord in the Roman republic ; and it was a similar attachment that accelerated the downfall of the French nobility. We as little approve of those *great masses* of property which our author fancies essential to the welfare of a state.—Great fortunes are seldom productive of any effects but those of vice and oppression ; and were there any equitable means of preventing their accumulation, common sense and common observation will easily inform us, that a nation would be more prosperous where property was more equally divided. See p. 68. 75.

4. Mr. B. has expended much declamation on the horrors of the 6th of October, and on the indignity to which a monarch was exposed, in being led captive by his subjects.—But was not the transaction, in reality, a necessary expedient to prevent great evils.—The flight of the king, the subversion perhaps of the new government, and, at least, the continued slaughter, the accumulated horrors of a civil war ? See p. 100, &c.

5. The man who would wish a return to the feudal darkness, the feudal oppression, scarcely deserves a serious reply.—Yet what is the intent of Mr. B.'s most florid declamation in favor of the times of chivalry, but the renewal of those absurdities, so deservedly abolished and execrated in almost every country of Europe ? See p. 111, 113.

6. We cannot help remarking that the violent impugners of the French revolution, are very far from consistent. The general clamour has been, that the French assembly have done nothing, that they have wasted their time in idle disputation, &c. &c.—Let our readers therefore judge of our surprise, when we found our author accusing them vehemently of haste and rashness in all their proceedings. For our own parts, though we see little ground for either accusation, yet we should rather incline

incline to the former opinion, than to that of Mr. Burke; since, such is the fallibility, such the jarring interests of men, that if any good is to be effected in a revolution, a wise legislator must catch the enthusiasm of the moment, without suffering the rapid torrent of virtue to subdivide into the numerous and narrow channels of self interest and corruption. See p. 130, 148.

7. We have many objections to the criterions by which Mr. B. chuses to estimate the excellence of a government, viz. Those of population and wealth. A government may be extremely oppressive in a country, where from other favorable circumstances, the human race may increase in a very considerable degree. *Lettres de Cachet*, arbitrary prosecutions, falsehood itself will not thin the human species to any considerable degree, though they may render human life extremely wretched and precarious. China is both rich and populous. Indostan and many other provinces of the East, were, till lately, very wealthy, and in some parts populous.—But who will say that these are good governments? The true criterions for judging of the excellence of a government, are the laws and their administration: to these we may add public tranquility and an exemption from foreign wars—and if by these rules we examine the late government of France, common sense must determine that it was a *very bad one*. See p. 189, &c.

8. There scarcely appears sufficient reason for Mr. Burke's apprehension, that the creation of *assignats* will produce an oligarchy in the state. What great advantage the officers employed for their emission can derive, above the officers of a mint or any other coinage, we are not able to divine. The Bank of England owes its influence to its being a great monied interest, and not to its paper currency only. See p. 277.

9. In criticising the new arrangements, Mr. B. objects to the exclusion of ministers from the National Assembly. We wish he had produced some arguments to evince the propriety of the executive servants of a state sitting to legislate for it. Could we lay aside our prejudice in favor of ancient forms, perhaps we should find that the chief effect of giving the executive officers seats in the legislative assembly, is that of enabling aspiring and intriguing demagogues, to seize with a violent hand the emoluments of a state. Oratory would then be the only talent requisite for a secretary of state, whereas we are convinced that there are many excellent men of business who are not possessed of this accomplishment: besides that, a seat in the Assembly of France, would only divert the ministers from an attention to their proper duties. The experiment had before been tried in America, and we believe with success. See p. 293.

10. Our author very pathetically laments the denying to the

sovereign the right of making peace and war. A right, which appears to us as useless to a monarch, as, in his hands, it may be pernicious to his people. Our constitution has provided a check upon this truly dangerous prerogative; and happy had it been for France, if Louis XIV, and the abandoned mistresses of his successor, had not been possessed of it. Indeed, when we reflect on the evils which every nation in Europe has experienced from the abuse of this prerogative, is it possible not to rejoice in its retrenchment?—or is it possible seriously to believe that foreign nations will esteem the solemn faith of a public assembly of the states a less venerable sanction than the sign manual of a monarch? See p. 296.

11. Mr. B. is not a generous adversary; he employs the most unfair stratagems against those whom he wishes to oppose. A considerable part of the volume before us, appears directly intended to render the king of France dissatisfied with his present situation, and to excite the soldiery to mutiny and rebellion. See p. 293, 294, 318, 319.

12. In other respects the morality of Mr. B. is, in general, less exceptionable; but it is merely an innocent rant, or is this pious author (for we believe him to be truly pious) really in earnest, when he indirectly prompts the queen to the commission of suicide? See p. 112.

There are, doubtless, other topics on which Mr. B. will be vigorously, and perhaps, successfully attacked by his numerous opponents. We have only chosen to remark upon a few points, so obviously adverse to the common rights, and common interests of mankind, that, we trust, few persons of candour and discernment, will be disposed to differ from us.—Speculations of a more dubious nature, we leave to others.

On some points, however, we esteem it a duty, not only to testify our approbation, but our agreement with our author. He is probably right in considering the mode of electing to the National Assembly, as too complex, and, perhaps, obnoxious to intrigue. A topic, on which Mr. B. has still more obvious advantage, is the extreme ill policy of local, temporary, and elective judges.—Elections are, indeed, a new acquisition to the French, and they seem too fond of them. Though we do not see the evil in the vast extent which our author seems to apprehend, yet it is impossible not to agree with him in the sentiment, that the emission of paper currency must be productive of a species of gambling.—The only question is, in the present state of their finances could this evil have been avoided? In these, and other respects, the publication of Mr. B. will be of service. It will call the attention of the Gallic legislature to these subjects; they will naturally be watchful of the operation of these arrangements; and should experience sanction the opinions of our author, we trust the collective wisdom

wisdom of that great nation will speedily rectify the errors of the moment.

From these observations the public may partly collect our sentiments on the present work, and its celebrated author. But should a more general opinion be demanded of us, respecting the genius and abilities of Mr. Burke, we do not hesitate to pronounce, that they have long appeared to us of so problematical a kind, that it is difficult to assign them their proper rank, or to make a fair estimate of their merits. The imagination of Mr. Burke is more vigorous and excursive than that of any modern writer. His mind is well stored with various literature, and there is scarcely a science to which he is not able to appeal for matter of illustration. His style is splendid, his diction easy and well adapted, and his periods as full and as harmonious as those of Bolingbroke. With all these accomplishments, as a speaker Mr. Burke is scarcely attended to; as a writer, his works will probably never obtain a permanent popularity. They will occasionally be quoted as affording specimens of every beauty of composition, but as a whole, scarcely any of them will command attention.

The truth is, that brilliant as are Mr. Burke's abilities, they are untempered with (what alone stamps a value on the endowments of the mind) judgment. The dupe of his imagination or his passions, he despises arrangement or logical precision. He loses himself in a wilderness of words and figures. For want of temper and cool reflexion, he is an old statesman without the benefit of experience; an universal scholar without methodical science. We are far from wishing to be understood, that there are no traits of a fine understanding in the speeches or the writings of our author; on the contrary they occasionally abound in new, deep, and even judicious reflexions. But we fear it must be confessed that he is but seldom correct and consistent.

We shall take a future opportunity of laying before our readers a few extracts, which we shall accompany with observations on the composition and style of this publication. (*To be continued.*)

ART. IX. *Reflections on the Causes and probable Consequences of the Late Revolution in France; with a View of the Ecclesiastical and Civil Constitution of Scotland, and of the Progress of its Agriculture and Commerce.—Translated from a Series of Letters, written originally in French, and dedicated to the National Assembly.* By Mons. B——de. 8vo. 193 pages. Pr. 3s. 6d. boards. Edinb. Hill. London, Cadell. 1790.

THE French Revolution excites very different ideas in the minds of the people of this country. There are some who regard it, as a mountain torrent, which must subside and disappear with the storm that produced it—others consider it as

a river that has been collecting for ages, as that mighty stream of human opinion, whose confluence is so vast, that no time can impede its flow or diminish its force. Some are so impressed by a view of the disorders that are inseparable from the energies attending the destruction of an old, and the formation of a new government, as to perceive nothing else, and to mistake the ruins of the ancient edifice, and the scaffolding used in building the new, for the eternal prospect of the place; while others, with more penetration and a profounder view of things, discover amidst the uncleared rubbish of the old, and the various preparations and process for building the new, the formation of a durable structure, which when these temporary irregularities are done away, will appear conspicuous in all its fair proportions of beauty and order. Of these sentiments is the author of the work before us, who, we are informed, is no Frenchman, but a gentleman in Edinburgh, who has distinguished himself for patriotism, by taking a principal part in the municipal reform of Scotland, now in agitation. These reflections will not diminish his fame. They are detailed in a series of twenty one letters (there is an error in the numbering of them, both in the table of contents, and in the book, from No. VII. to XXI) written in the character of an intelligent Frenchman, who, from having incurred some popular odium, is supposed to have retired to this country, as not conceiving himself perfectly safe in his own, until the new constitution should be completely organized and finished; and to employ himself in communicating to his friend in France, his observations on the progress of their new government, and various other subjects relative to it, and the British constitution. This form, we imagine, has been adopted by our author, as well to give more point to his remarks, as to awaken a greater degree of attention from the public; for we are naturally more curious to hear what a stranger will say of us, than one of ourselves.

These letters are preceded by a dedication to the National Assembly, written in a style of rational and manly eloquence, and worthy of being addressed to those who act so illustrious a part in the present important æra of human affairs. Letters 1st, 2d, and 3d, contain reflections on the general causes and circumstances of the French Revolution. Letters 4th, 5th, and 6th, on its probable effects, both with regard to France and to other nations *. Letter 7th, on the dangers to which the new government may still be exposed, from the aristocracy, the national debt, and the interference of other kingdoms. This is all that immediately relates to France,

* Note. In these the author has been considerably indebted to our review of Anquetil du Perron's *Dignité du Commerce*, in our number for October, 1789.

for our author, being a man of observation, is now supposed to have left London on a tour to Scotland, with a view to inform himself of the present state of its religion, government, commerce, and arts, as it is a country, about which foreigners have had much less information in all these particulars, than they have had concerning England. Letter 8th, therefore, commences with a general sketch of the appearance of that kingdom, its prosperous change, the industry and fanaticism of the people. Letter 9th, their religious sentiments and enthusiasm. Letters 10th, and 11th, their ecclesiastical system, the character and power of the clergy. Letters 12th, 13th, and 14th, the progress and present state of civil liberty in Scotland. Letters 15th, and 16th, the nature and defects of their judicial establishment, with the influence they have on the liberty of the press. Letters 17th, and 18th, the progress and state of their agriculture. Letter 19th, their commerce and manufactures—fishing towns, and parish schools. Letter 20th, a short view of the state of literature in Scotland, and of the character of modern writers—of the danger the British constitution is exposed to, from the magnitude of the capital, of the national debt, and from its corrupt principles. Letter 21st, improbability of the English imitating the French Revolution, from their freedom, the danger of a change, and their distrust of patriotism—their ideas on the abolition of titles—conclusion.

Having given this brief analysis, it now only remains that we should make a few extracts, and add some remarks on the author's execution of his plan; in doing which we profess to be guided by candour, and a love of truth, principles equally imposed upon us by our own feelings, and by the duty we owe to the public.

The following extract from Letter 2, is a favourable specimen of the author's style and mode of reasoning, and is, we believe, at once historically and philosophically just.

‘ The character of Louis XVI. tended to facilitate the progress, and accelerate the approach, of an event, the most important and glorious in the annals of the kingdom. By nature indolent, by education dissolute, he had neither penetration to foresee, nor fortitude to resist the impending storm. Occupied with the pageantry of a court, and pleased with splendour, he felt no concern for his prerogative, which he deemed beyond the reach of human power. While men are imperfect, unlimited power must be attended with its abuse. That flattery which imposes on the understanding, also corrupts the heart. To preserve the energy of virtue amid the dissolute pleasures of a court, to retain the entire vigour of the mind amid unbounded indulgence, are attainments barely possible. To perfuse with undeviating rectitude, while assailed by every temptation,

tation, and beyond the reach of all controul, is a felicity for which human infirmity forbids us to hope. The want of exercise for his talents, and not a defect of nature, rendered him weak: an easiness of disposition, not cruelty, made him consent to be severe. In his situation, a character less exceptionable would have been more extraordinary. Such qualities in the monarch could prove but a feeble check to that bold and independent spirit which had already begun to actuate his people.'

In general his observations on French affairs are both correct and profound, yet we cannot agree with him in his idea that the French ministry, in the year 1787, fomented the disturbances of Holland, with a view of plunging their country into a foreign war in order to stifle the popular discontents at home: the event that followed is a clear proof to the contrary; and their sole motive seems to have been that principle of aggrandizement and jealousy of Britain, which was always uppermost in the cabinet of the old government, and which, by crushing the power of the Stadholder, Britain's friend, sought for ever to detach Holland from her alliance with their dreaded rival.

The sketch of the causes that immediately led to the French Revolution would have been more complete, had not that capital and leading circumstance of the *meeting of the Notables* been totally suppressed. But leaving this, we hasten to our author's delineation of Scottish affairs, where we naturally expect to find him every way *at home*; and yet, were we not assured to the contrary, even there we should, in some places, be apt to trace rather the *traveller's hasty sketch*, than the accurate description of the *native philosopher*. For surely the picture of the Scottish clergy and people is sadly overcharged, when they are represented, page 69, as 'disputing about the unintelligible mysteries of faith, with all the rancour and animosity of the barbarous ages. The sects (it is added) into which the people are divided, are almost as numerous as the counties, and are incensed against each other with an acrimony, which the power of the civil magistrate, or the dread of popery, alone can restrain.' And again, p. 81,

'A considerable portion of the clergy are from this circumstance (the smallness of the livings) men of low birth, who, by *the fruits of their own industry*, have been able to purchase a very scanty education, and that not till after they have arrived at the years of manhood. After their appointment to the church, these persons must of necessity *blend with the vulgar*, whose habits and sentiments so nearly resemble their own. Among them they soon *re-assume* all those wild and mysterious notions which are inseparable from that rank of life, and which their narrow education had but partially corrected. Hence all the polemical divinity and enthusiastic notions of the last century continue to be re-tailed.'

tailed among the believing multitude. Moral duties are neglected, heresies are condemned, religious zeal and bigotry are perpetuated from one generation to another.'

Granted, that the clergymen in Scotland are in general men of low birth, yet from our own personal knowledge we can venture to say, that this mode of obtaining their education is exceedingly rare. The usual way is, in early life, at the charge of their friends, or from the foundations or bursaries at their Universities, which though small are very numerous, and are mostly distributed to those students on their entry, who, at a public trial for that purpose, exhibit the greatest proficiency in the knowledge of the Latin language. Some of the bursaries are in the gift of patrons, men of landed property, who are never unwilling to confer them upon the sons of their tenants. This supply is always insufficient for the expence of their education and books, and frequently of their board and lodging. In the interval of the vacations, which last from five to seven months, those students destined for the Church, and whose circumstances render it necessary, are generally employed either as teachers in schools or private tutors. Educated in this way, as many of them are, the Scottish clergy, when called to the exercise of the sacred function, *do not of necessity herd with the vulgar*, but are admitted into the most respectable society; although at the same time, their attention to the duties of their pastoral care leaves them but little leisure, and less inclination, for the company of the gay, the free-thinking, and the dissipated part of their countrymen; from which they are also dissuaded by a severe spirit of religion, that forbids much intercourse with the world at large. As to the idea of their reassuming all *those wild and mysterious notions*, which are inseparable from that rank of life, it is a contradiction in terms, and viewed in the most favourable light is altogether fanciful. The truth is, that the author indulges too much in general and indiscriminate censure, and most of his invectives against the religious sentiments of his countrymen, will apply equally in all countries, where Calvinism is the established mode of religion. His assertion too, that, 'to suppose a man of enquiry in Scotland pays any regard to revelation, will hardly be deemed a compliment—to presume that he believes the orthodox notions of the stricter clergy, will be received as the greatest insult to his understanding'—is much beyond the truth. It will apply, perhaps, in a degree, to Edinburgh, where two great classes of bigots and deists divide the people, but by no means to the kingdom at large. Occasionally, however, our author's native good sense and candour corrects the acrimony of his philosophy, and under this favourable aspect

we are glad to introduce him to our readers, as he appears in letter 9. p. 77.

‘ The religious ideas here taken notice of, and that unjustifiable conduct to which they give rise, are confined to the lowest class of the people, and to the more illiterate part of the clergy. You will most egregiously err, should you apply the description to the whole of the ecclesiastical order. There are many individuals of that body of men, whose characters are of the highest worth and respectability. Their writings, which have been translated into almost every language of Europe, you yourself have read; and can therefore testify how much they have contributed to adorn literature. Their compositions in philosophy, morals, and history have, in point of merit, never perhaps been surpassed by any, and must be ranked by posterity among the most successful attempts to enlarge the boundaries of human knowledge. Neither their learning nor example, however, has yet been able to banish entirely that enthusiastic spirit, which has, for more than two centuries, been the characteristic of the vulgar. Satisfied with discovering truth themselves, they have used no strenuous efforts to reform the multitude, which they suppose must always be governed by grosser systems of mystery and error.’

But although more anxious to praise than to censure, we cannot avoid remarking the very uncandid manner in which he takes notice of the proceedings of the assembly relative to Dr. Maegill, who had published a book, that was complained of as favourable to the tenets of Socinus.

‘ There is recorded in the transactions of the Apostles, an incident exactly parallel to what frequently happens in Scotland, when the general assembly of the church *meets*, as it did last year, *to pass judgment on a heretic*. We are there told, that one Demetrius, a silversmith, a votary of Paganism, defended his superstition, by arguments and motives, which will illustrate the character and views of too great a part of the clergy,’ &c.

Would not any one from the preceding sentence infer, that the assembly met only for the purpose of passing judgment on a heretic? It is necessary to say, however, the assembly or supreme court of the church of Scotland, the government of which so far agrees with the levelling spirit of the Gospel, in that it is a *pure democracy*, meet annually on the general business of the church, and to determine all appeals from the inferior courts; and that were the cases of fifty heretics to be brought before them, they would neither meet oftener nor sooner than the stated annual period. While an established church remains in a country, where toleration is enjoyed to a degree unknown in England, (the Test and Corporation A&ts having no force in Scotland) much may be said on the right possessed by the members of that establishment, of exacting from the clergy professing themselves its members, a strict adherence to the national creed, to which they have given their assent and subscription.

We

We cannot help differing from our author in his sentiments of chusing the clergy, without the approbation of their people, but this is not the place to enter upon our reasons.

He has been guilty of a great mistake, when he mentions in page 91, the presbytery to be a court composed, 'one half of members taken from the loom or the plough.' Every one knows that it consists entirely of the clergymen of a district of parishes, and that no layman ever appears there, except a ruling elder, and that only when he is deputed for some special purpose. The author evidently confounds the presbytery, with the Court of Session, which regulates the affairs of each congregation, and is the lowest court in the church judicature.

The power possessed and exercised by the clergy of the church of Scotland, over the manners of their own order, does not appear to us a grievance. One of the greatest arguments in favour of the truth of religion, is the regular and moral conduct of its public teachers. When that gives the lie to their doctrines, the foundation of public virtue is sapped, and the vulgar draw an excuse for every crime they commit. Perhaps the prevalence of irreligion in the southern part of Britain, is chiefly owing to the careless and dissolute lives of many of the established clergy. But enough of the Kirk. Let us now attend to our author's delineation of the commerce, agriculture, and literature of Scotland, of all of which he hath given masterly sketches, but our limits hardly permit us to glance at them.

The following facts are perhaps new to our English readers.

' The whole number of electors in Scotland, does not exceed 2648, of which 1235* are said to be created by fictitious transactions between the aristocracy, and the dependent and dishonourable instruments of their ambition.

' A cause, which in England is decided in a few hours, in Scotland is sometimes protracted for as many years. Intricate forms increase the number of lawyers, and put it in their power to spin out that business, by which they subsist. The extent of all the property litigated in the courts of Scotland, does not probably equal the sum annually paid to the retainers of the law. If this be a fact, its judicial establishment is more pernicious than beneficial: lawyers are not, in that case, the protectors of property, but a continual drain of the wealth of the nation. The avarice and overgrown wealth of the Roman Catholic clergy, were the causes that rouzed the indignation of the people, and paved the way to a regeneration of the ecclesiastical establishment.

* He means the electors for counties. The independent part of the Scottish nation, is at last rouzed against these nominal and collusive titles, which, with the late decisions of the Lord Chancellor, bids fair to put a stop to this abuse.

Similar circumstances attending their judicial arrangements, may, in these also, produce similar effects.'

This account of the administration of Scottish law, has the more weight, as coming from a professional man. Our grievances, in this respect, we find, are but trivial, compared to those of our brethren on the other side of the Tweed. We sincerely wish them speedy redress, convinced at the same time that our own legal forms stand also in much need of reformation. In the liberty of the press too, we find that we have a far greater license than they, and that, owing to all causes for libels being tried without a jury. The following account is curious.

' It is to the periodical publications of the English, that this people are solely indebted for all political information. You would smile to see the cautious artifices here employed by the publisher of a newspaper, when he inserts any intelligence of a free or bold complexion. He takes care to warn you, that it is extracted from a London paper; that such and such reports are current, concerning the truth of which he will not affirm; and that he will correct his information when applied to by the parties concerned. Thus the most flagrant conduct of a person in office may here be furnished, and believed over the whole nation, long before any individual dares attempt to disclose it in print. The corrupt magistrate, or unworthy citizen, with regard to Scotland, may be tolerably secure; it is in the English papers, &c.'

But we must not extend our extracts. The author is every where interesting and liberal in his remarks, except where the national church comes in his way, when he occasionally shews a degree of acrimony and want of information, by no means consistent with his general talents and investigation. But these few blemishes detract not from the merit of the work at large, which we recommend to our readers as highly worthy their attention, and which confers upon its author no inconsiderable rank among those writers of his own country, whose merits he so handsomely celebrates. Without wishing to lessen however the literary fame of our Scottish brethren, who have certainly made wonderful progress in all works of taste and genius, we cannot think that the glory of literature, as our author insinuates, has wholly left England to illuminate them. We have still among us several authors, 'who, (to use his own expression) have successfully disputed the palm of merit with the most celebrated of the dead.'

Before taking leave of him, we must also request, that in future, he will be more attentive to his style, which, though in general perspicuous, and occasionally elegant, sometimes fails in point of harmony and chastity. The refined ear of the public can hardly tolerate such an inversion of phrase, as 'saw lowering the cloud,' 'retains of the mind,' 'England, separated from the continent by the sea, and using a language

'there not understood,' &c. The adverb *there*, by this order of words, refers to *sea*. *Enfeeblement* is not English.

This article has increased under our hands much beyond our first intention; but the subjects are important, and at present occupy the public mind. There is a novelty too in the philosophical disquisitions concerning Scotland, which will attract attention, and we were anxious to correct them, whenever they appeared to us likely to convey wrong, or unfavourable impressions, of the subjects discussed. u. u.

ART. X. *Free Thoughts on Liberty, and the Revolution in France.* By the Author of a Letter to Earl Stanhope on the Test Act. 8vo. p. 55. Pr. 1s. Oxford, Fletcher; London, Rivingtons. 1790.

THIS very *pleasant* writer sets out with a fair confession, that he does not understand the very term which he has undertaken to discuss; and we must do him the justice to own, that in this he is not guilty of any *deception*. Notwithstanding this radical defect, he has, however, made some curious discoveries, which it may possibly be to the entertainment of our readers, briefly to point out.—He has found out, 'That if men ever did exist in a state of nature, then were they out of society *; that the term 'liberty, presupposes a controlling power +; ' that the French have destroyed an established *right*, in destroying the privileges of the nobility ‡; and this without proving what *right* they had to these privileges: he finds out (what no other person has) that 'they have tumbled their king from his throne.' In the same spirit of discovery, he finds out that it is an unparalleled degree of phrenzy to sacrifice shoe buckles; that coloquintada § has not the flavour of pine apple; that by the *rights of man*, so much the theme of modern philosophers, is implied, that—'He hath a right of running about wild in *puris naturalibus* **.' In short, he has discovered, that the *devil* has got among the Frenchmen ††.

The pamphlet is, however, meant to be serious, and the general plan of it is to prove, by a kind of scholastic metaphysics, that *law is something superior and paramount to the authority of the people*; and that all government is *an immediate emanation from God*. As a specimen of our author's manner of reasoning, we select the following definition of liberty, a word which, however, at first he seemed to think it impossible to define: p. 20.

'Liberty is the offspring of heaven, the gift of God to man, and is the privilege and birthright of every person born in society. True liberty is not subject to the will or caprice of one;

* P. 8.

† P. 10.

‡ P. 12.

§ P. 16.

** P. 17.

†† P. 33.

it is not subject to the wild edicts of mad demagogues, neither doth it consist in the absence of all restraint. Liberty is a perfect law, and in its operations as a law must be productive of restraint, &c.'

Again, in establishing his favourite point: p. 40.

' The power of government upon earth is an emanation from the divine power, and to be regulated by it. It originates not with ourselves, but flows down to us from the supreme power, and he that violates it, offends not against the majesty of the people, but against the majesty of heaven, who hath placed man upon the earth, and hath given him a law which shall not be broken, &c.'

Hear what he says of our venerable constitution? p. 49.

' The constitution of England *combines* within it *all the known forms of government* exercised in the civilized world, and moulding them into one, holds forth every blessing to the subject which government is capable of affording.'

For the credit of the university, let us hope, that this is the production of some undergraduate willing to try his hand at a thesis, or preparing for a school declamation.

B.

ART. XI. *Remarkable Extracts, selected from a Work printed in the Year 1687, by Peter Jurieu, entitled, The Accomplishment of the Scripture Prophecies, &c. in which are pointed out, in an extraordinary Manner, many Things analogous to the present great Changes in France; particularly the Equalization of Mankind; the Fall of the Pope's Authority; of Tyranny; of the Nunneries, &c. and of Titles of Honour. Which Reformation the Author predicts, will be brought about, not by the Ministry of some new Preachers, but by an heavenly Operation, that shall open the Eyes of them who are as yet in Darkness.* To which are added, several *Acts and Decrees of the National Assembly of France, similar thereto.* By Edward May. 12mo. p. 51. pr. 1s. Darton. 1790.

THE great diversity of applications which have, with different degrees of plausibility, been made of the mysterious prophecies of the *Book of Revelation* to historical events, may leave some reason to question, whether the true key to these prophecies has yet been found. But we have at present no further concern with this question, than merely to inform our readers of a simple fact, that certain passages from a work published in 1687, are here reprinted, in which the author, in explaining the *Book of Revelation*, mentions the French in a very particular manner, as the nation which should be the first to begin the great work of general reformation. M. B.

ART. XVI. *Sermons*, by Hugh Blair, D. D. F. R. S. Ed. One of the Ministers of the High Church, and Professor of Rhetoric and Belles Lettres in the University of Edinburgh. Volume the Third. 8vo. 442 p. 6s. in boards. Cadell. 1790.

THE two former volumes of these celebrated Sermons were published before the commencement of our Review; but as the present may justly rank with them, in point of merit, we shall endeavour to give such an analysis and critique of it, as may convey to our readers an impartial opinion of the whole. In conformity to our general plan, we shall state the contents, or subject matter of each discourse, accompanied with extracts, and conclude our review with some critical remarks.

Ser. I. On the true Honour of Man. After stating the striking characteristics of true honour, and shewing that it cannot arise from mere dignity of rank, or office; from riches, superior abilities, or from any adventitious circumstances of fortune, Dr. B. concludes by asserting, that it must consist in the union of religion and virtue. Text, Prov. iv. 8. We select the following passage from this discourse. p. 14.

'It is to be farther observed, that the universal consent of mankind in honouring real virtue, is sufficient to show what the genuine sense of human nature is on this subject. All other claims of honour are ambulatory and changeable. The degrees of respect paid to external stations vary with forms of government, and fashions of the times. Qualities which in one country are highly honoured, in another are lightly esteemed. Nay, what in some regions of the earth distinguishes a man above others, might elsewhere expose him to contempt or ridicule. But where was ever the nation on the face of the globe, who did not honour unblemished worth, unaffected piety, stedfast, humane, and regular virtue? To whom were altars erected in the Heathen world, but to those who by their merits and heroic labours, by their invention of useful arts, or by some signal acts of beneficence to their country, or to mankind, were found worthy, in their opinion, to be transferred from among men, and added to the number of the gods?—Even the counterfeited appearances of virtue, which are so often found in the world, are testimonies to its praise. The hypocrite knows that, without assuming the garb of virtue, every other advantage he can possess is insufficient to procure him esteem. Interference of interest, or perversity of disposition, may occasionally lead individuals to oppose, even to hate, the upright and the good. But however the characters of such persons may be mistaken, or misrepresented, yet, as far as they are acknowledged to be virtuous, the profligate dare not traduce them. Genuine virtue has a language that speaks to every heart throughout the world. It is a language which is understood by all. In every region, every clime, the homage paid to it is the same. In no one sentiment were ever mankind more generally agreed.'

We rather wonder that a writer of Dr. B.'s sagacious and comprehensive mind, in discussing this subject, did not animadvert on that false honour, which is so often the cause of duels, and which, instead of being the offspring of virtue, is always the associate of folly, pride and insolence.

II. On Sensibility, considered in two views; 'its influence on our moral conduct, and its influence on our happiness.' As this sermon is almost wholly of a moral complexion, we expected to find some notice taken of that sickly sensibility, which is often cherished by the foolish novels with which our circulating libraries abound, and which, we believe, have been instrumental in spreading the affectation of virtue instead of the reality, and leading many of the 'fairest portion of the human species to ruin and dishonour. Text, Rom. xii. 15.

III. On the Improvement of Time; in which the preacher shews us with what dispositions of mind we should regard the past, the present and the future. An excellent discourse; serious, practical and pious. Text, Gen. XLVII. 8. *And Pharaoh said unto Jacob, How old art thou?* We transcribe part of the last division. p. 58.

• Consider with what dispositions we ought to look forward to those years of our life that may yet be to come. Merely to look forward to them, is what requires no admonition. Futurity is the great object on which the imaginations of men are employed; for the sake of which the past is forgotten, and the present too often neglected. All time is in a manner swallowed up by it. On futurity, men build their designs; on futurity, they rest their hopes; and though not happy at the present, they always reckon on becoming so, at some subsequent period of their lives. This propensity to look forward, was for wise purposes implanted in the human breast. It serves to give proper occupation to the active powers of the mind, and to quicken all its exertions. But it is too often immoderately indulged, and grossly abused. The curiosity which sometimes prompts persons to inquire, by unlawful methods, into what is to come, is equally foolish and sinful. Let us restrain all desire of penetrating farther than is allowed us, into that dark and unknown region. Futurity belongs to God: and happy for us is that mysterious veil with which his wisdom has covered it. Were it in our power to lift up the veil, and to behold what it conceals, many and many a thorn we should plant in our breasts. The proper and rational conduct of men with regard to futurity, is regulated by two considerations: First, that much of what it contains, must remain to us absolutely unknown; next, that there are also some events in it which may be certainly known and foreseen.

• First, much of futurity is, and must be, entirely unknown to us. When we speculate about the continuance of our life, and the events which are to fill it, we behold a river which is always flowing; but which soon escapes out of our sight, and is covered with mists and darkness. Some of its windings we may endeavour to trace; but it is only for a very short way that we are able to pursue them. In endless conjectures we quickly find ourselves bewildered; and, often, the next event that happens baffles all the reasonings we had formed concerning the succession of events. The consequence which follows from this is, that all the anxiety about futurity, which passes the bounds of reasonable precaution, is unprofitable and vain. Certain measures are indeed necessary to be taken for our safety. We are not to rush forward inconsiderate and headlong. We must make, as far as we are able, provision for future welfare; and guard against dangers which apparently threaten. But having done this, we must stop; and leave the rest to

Him

Him who disposeth of futurity at his will. *He who sitteth in the heavens laughs at the wisdom and the plans of worldly men. Wherefore, boast not thyself of to-morrow; for thou knowest not what a day may bring forth.* For the same reason, despair not of to-morrow; for it may bring forth good as well as evil. Vex not yourselves with imaginary fears. The impending black cloud, to which you look up with so much dread, may pass by harmless; or though it should discharge the storm, yet, before it breaks, you may be lodged in that lowly mansion which no storms ever touch.'

iv. On the Duties belonging to Middle Age. This discourse is replete with moral precepts and prudential maxims; but as a sermon, we think it inferior to the generality of those which compose the present volume. Text, 1 Cor. xiii. 11.

v. On Death. In discoursing on this subject, Dr. B. considers the manner in which we ought to be affected by the death of strangers, friends and enemies. Text, Eccles. xii. 5. This sermon is more descriptive and declamatory than others. It abounds also with common-place remarks; but, indeed, what novelty can be expected in discussing a subject on which every human being is interested, and, in some measure, forced to think. We perfectly agree with the author when he observes, p. 106.

' Because topics of this nature are obvious, let it not be thought that they are without use. They require to be recalled, repeated, and enforced. Moral and religious instruction derives its efficacy, not so much from what men are taught to know, as from what they are brought to feel. It is not the dormant knowledge of any truths, but the vivid impression of them, which has influence on practice. Neither let it be thought, that such meditations are unseasonable intrusions upon those who are living in health, in affluence, and ease. There is no hazard of their making too deep or painful an impression. The gloom which they occasion is transient; and will soon, too soon, it is probable, be dispelled by the succeeding affairs and pleasures of the world. To wisdom it certainly belongs, that men should be impressed with just views of their nature, and their state: and the pleasures of life will always be enjoyed to most advantage when they are tempered with serious thought.'

But we must observe, that Dr. B. in this sermon, and on two or three other occasions, has attempted the pathetic; but, we think, without success. The reader shall judge.

' *There, says Job, are the small and the great.* There, the poor man lays down at last the burden of his wearisome life. No more shall he groan under the load of poverty and toil. No more shall he hear the insolent calls of the master, from whom he received his scanty wages. No more shall he be raised from needful slumber on his bed of straw, nor be hurried away from his homely meal, to undergo the repeated labours of the day. While his humble grave is preparing, and a few poor and decayed neighbours are carrying him thither, it is good for us to think, that this man too was our brother; that for him the aged and destitute wife, and the needy children now weep; that, neglected as he was by the world, he possessed perhaps both a sound understanding, and a worthy heart; and is now carried by angels to rest in

Abraham's

Abraham's bosom.—At no great distance from him, the grave is opened to receive the rich and proud man. For, as it is said with emphasis in the parable, *the rich man also died, and was buried*. He also died. His riches prevented not his sharing the same fate with the poor man; perhaps, through luxury, they accelerated his doom. Then, indeed, *the mourners go about the streets*; and while, in all the pomp and magnificence of woe, his funeral is prepared, his heirs, in the mean time, impatient to examine his will, are looking on one another with jealous eyes, and already beginning to quarrel about the division of his substance.—One day, we see carried along the coffin of the smiling infant; the flower just nipp'd as it began to blossom in the parents view; and the next day, we behold the young man, or young woman, of blooming form and promising hopes, laid in an untimely grave. While the funeral is attended by a numerous, unconcerned company, who are discoursing to one another about the news of the day, or the ordinary affairs of life, let our thoughts rather follow to the house of mourning, and represent to themselves what is going on there. There, we should see a disconsolate family, sitting in silent grief, thinking of the sad breach that is made in their little society; and, with tears in their eyes, looking to the chamber that is now left vacant, and to every memorial that presents itself of their departed friend. By such attention to the woes of others, the selfish hardness of our hearts will be gradually softened, and melted down into humanity.'

vi. On the Progress of Vice; in which youth are warned of the dangers of evil communications. Text, 1 Cor. xv. 33. This discourse may be said to contain a sensible lesson on prudential conduct, founded chiefly on the motives of interest, worldly wisdom, and reputation among men. The following is a proper specimen. p. 112.

‘ As they [the young] begin to mingle more in the world, and emerge into the circles of gaiety and pleasure, finding these loose ideas countenanced by too general practice, they gradually become bolder in the liberties they take. If they have been bred to business, they begin to tire of industry, and look with contempt on the plodding race of citizens. If they be of superior rank, they think it becomes them to resemble their equals; to assume that freedom of behaviour, that air of forwardness, that tone of dissipation, that easy negligence of those with whom they converse, which appear fashionable in high life. If affluence of fortune unhappily concur to favour their inclinations, amusements and diversions succeed in a perpetual round; night and day are confounded; gaming fills up their vacant intervals; they live wholly in public places; they run into many degrees of excess, disagreeable even to themselves, merely from weak complaisance, and the fear of being ridiculed by their loose associates. Among these associates, the most hardened and determined always take the lead. The rest follow them with implicit submission; and make proficiency in the school of iniquity, in exact proportion to the weakness of their understandings, and the strength of their passions.

‘ How many pass away, after this manner, some of the most valuable years of their life, lost in a whirlpool of what cannot be called pleasure, so much as mere giddiness and folly? In the habits of perpetual connection with idle or licentious company, all reflection is lost; while,

while, circulated from one empty head, and one thoughtless heart, to another, folly shoots up into all its most ridiculous forms; prompts the extravagant, unmeaning frolic in private; or falls forth in public into mad riot; impelled sometimes by intoxication, sometimes by mere levity of spirits.'

VII. On Fortitude; its importance shewn; the grounds on which it must rest explained, with 'some considerations for assisting the exercise of it.' Text, Ps. xxvii. 3. We can only say of this discourse that it is sensible.

VIII. On Envy; the general causes of this passion pointed out, and its dangerous folly considered. Text, 1 Cor. xiii. 4. Had we met with the substance of this sermon in any other form, we should have called it a moral essay, not distinguished for any accuracy of disquisition, or sagacity of remark, with a page of divinity by way of conclusion. P. 158.

' Among external advantages, (says Dr. B.) those which relate to the body ought certainly, in the comparative estimation of ourselves and others, to hold the lowest place; as in the acquisition of them we can claim no merit, but must ascribe them entirely to the gift of nature. Yet envy has often showed itself here in full malignity; though a small measure of reflection might have discovered, that there was little or no ground for this passion to arise. It would have proved a blessing to multitudes, to have wanted those advantages for which they are envied. How frequently, for instance, has beauty betrayed the possessors of it into many a snare, and brought upon them many a disaster? Beheld with spiteful eyes by those who are their rivals, they, in the mean time, glow with no less envy against others by whom they are surpassed; while, in the midst of their competitions, jealousies, and concealed enmities, the fading flower is easily blasted; shortlived at the best; and trifling, at any rate, in comparison with the higher, and more lasting beauties of the mind.'

' But of all the grounds of envy among men, superiority in rank and fortune is the most general. Hence, the malignity which the poor commonly bear to the rich, as ingrossing to themselves all the comforts of life. Hence, the evil eye with which persons of inferior stations scrutinise those who are above them in rank; and if they approach to that rank, their envy is generally strongest against such as are just one step higher than themselves.'

Again, p. 162.

' Superior success in the course of worldly pursuits, is a frequent ground of envy. Among all ranks of men, competitions arise. Wherever any favourite object is pursued in common, jealousies seldom fail to take place among those who are equally desirous of attaining it; as in that ancient instance of envy recorded of Joseph's brethren, who *bated their brother, because their father loved him more than all the rest.* "I could easily bear," says one, "that some others should be more reputable or famous, should be richer or greater, than I. It is but just, that this man should enjoy the distinction to which his splendid abilities have raised him. It is natural for that man, to command the respect to which he is intitled by his birth or his rank. But when I, and another, have started in the race of life, upon equal terms, and in the same rank; that he, without any pretension to uncommon merit,

should have suddenly so far outstripped me; should have ingrossed all that public favour to which I am no less intitled than he; this is what I cannot bear; my blood boils, my spirit swells with indignation, at this undeserved treatment I have suffered from the world." Complaints of this nature are often made, by them who seek to justify the envy which they bear to their more prosperous neighbours. But if such persons wish not to be thought unjust, let me desire them to inquire, whether they have been altogether fair in the comparison they have made of their own merit with that of their rivals; and whether they have not themselves to blame, more than the world, for being left behind in the career of fortune.'

ix. On Idleness. In discoursing on this subject, the author 'studies to show,' that the idle man is both foolish and criminal; that he neither lives to God, nor to the world, nor to himself. Text, Matt. xx. 6. We class this Sermon, in point of merit, with the last.

x. On the Sense of the Divine Presence. An excellent Discourse; in which are shewn the benefits, which good men derive from an habitual sense of the Divine Presence, in the different conditions of life. Text, Psal. LXXXIII. 23. *I am continually with thee.* P. 203.

It is on such sentiments and language as the following passage exhibits, that Dr. Blair's just reputation is founded.

'Mere law, among men, is rigid and inflexible. As no human lawgiver can look into the hearts of his subjects, he cannot, even though he were ever present with them, estimate their character exactly. He can make no allowance for particular situations. He must prescribe the same terms to all whom he rules; and treat all alike, according to their outward actions. But every minute diversity of character, temper, and situation, is known to God. It is not only from what his servants do, but from what they seek to do, that he forms his judgment of them. He attends to all those circumstances which render the trial of their virtue, at any time, peculiarly hard. He hears the whisper of devotion as it rises in the soul. He beholds the tear of contrition which falls in secret. He sees the good intention struggling in its birth; and pursues it, in its progress, through those various obstacles which may prevent it from ripening into action. Good men, therefore, in their most humbled and dejected state, draw some consolation from his knowledge of their heart. Though they may sometimes have erred from the right path, they can look up to him who is ever with them, and say, as an apostle, who had grievously offended, once said to his great Master, *Lord, thou knowest all things: thou knowest that I love thee.*

'Appealing thus to the omniscient witness, they are naturally soothed and encouraged by the hope of his clemency. At the same time, it is the peculiar advantage of this sentiment of the divine presence, that it prevents such hope from flattering them too much, or rising into undue presumption. For while it encourages, it tends also to humble, a pious man. If it encourage him, by the reflection on all his good dispositions being known and attended to by God, it humbles him, by the remembrance,

that his secret sins also are ever in the light of the divine countenance. So that, by dwelling under the sense of God being continually with us, we keep alive the proper temper of a Christian in the soul; humility, without dejection; fear, mingled with hope. We are cheered, without being lifted up. We feel ourselves obnoxious to the all-observing eye of justice; but are comforted with the thoughts of that mercy which, through Jesus Christ, the Discerner of all Hearts holds forth to the sincere and penitent.'

xi. The duty of Patience recommended under provocations, disappointments, restraints, injuries and afflictions. Sensible and moral; but not so interesting as many others. Text, Luke XXI. 19.

xii. Moderation recommended in our wishes, pursuits, expectations, pleasures, and in all our passions. The following passage is in the true manner of our author. P. 246.

" You have strayed, my friends, from the road which conducts to felicity; you have dishonoured the native dignity of your souls, in allowing your wishes to terminate on nothing higher than worldly ideas of greatness or happiness. Your imagination roves in a land of shadows. Unreal forms deceive you. It is no more than a phantom, an illusion of happiness which attracts your fond admiration; nay, an illusion of happiness which often conceals much real misery. Do you imagine, that all are happy, who have attained to those summits of distinction, towards which your wishes aspire? Alas! how frequently has experience shewed, that where roses were supposed to bloom, nothing but briars and thorns grew? Reputation, beauty, riches, grandeur, nay, royalty itself, would, many a time, have been gladly exchanged by the possessors, for that more quiet and humble station, with which you are now dissatisfied. With all that is splendid and shining in the world, it is decreed that there should mix many deep shades of woe. On the elevated situations of fortune, the great calamities of life chiefly fall. There the storm spends its violence, and there the thunder breaks; while safe and unhurt the inhabitant of the vale remains below.—Retreat, then, from those vain and pernicious excursions of extravagant desire. Satisfy yourselves with what is rational and attainable. Train your minds to moderate views of human life, and human happiness. Remember, and admire, the wisdom of Agur's wish. *Remove far from me vanity and lies. Give me neither poverty nor riches. Feed me with food convenient for me: Lest I be full, and deny thee, and say, Who is the Lord? or lest I be poor and steal, and take the name of my God in vain.*"

The whole sermon is rational and pleasing. Text, Philip. IV. 5.

xiii. The causes of 'the Joy and the Bitterness of the Heart' stated, with practical improvements on the subject. This discourse is rather desultory in the composition, and, we think, of inferior merit to the rest.

xiv. On Characters of imperfect Goodness. This is one of the best sermons in the volume. The author here displays an extensive knowledge of life, and an intimate acquaintance

with the human heart. The subject turns on the conduct of the young Ruler. The ordinary failings of men, but particularly of young men, are stated, and the union of amiable with estimable qualities strongly recommended. Text, Mark x. 21. We select some judicious remarks. P. 295.

‘ Nothing can be more amiable than a constant desire to please; and an unwillingness to offend or hurt. Yet in characters where this is a predominant feature, defects are often found. Fond always to oblige, and afraid to utter any disagreeable truth, such persons are sometimes led to dissemble. Their love of truth is sacrificed to their love of pleasing. Their speech, and their manners, assume a studied courtesy. You cannot always depend on their smile; nor, when they promise, be sure of the performance. They mean and intend well. But the good intention is temporary. Like wax, they yield easily to every impression; and the transient friendship contracted with one person, is effaced by the next. Undistinguishing desire to oblige, often proves, in the present state of human things, a dangerous habit. They who cannot, on many occasions, give a firm and steady denial, or who cannot break off a connection, which has been hastily and improperly formed, stand on the brink of many mischiefs. They will be seduced by the corrupting, ensnared by the artful, betrayed by those in whom they had placed their trust. Unsuspicious themselves, they were flattered with the belief of having many friends around them. Elated with sanguine hopes, and cheerful spirits, they reckoned, that *to-morrow would be as this day, and more abundant.* Injudicious liberality, and thoughtless profusion, are the consequence; until, in the end, the straits to which they are reduced, bring them into mean or dishonourable courses. Through innocent, but unguarded weakness, and from want of the severer virtues, they are, in process of time, betrayed into downright crimes. Such may be the conclusion of those, who, like the young ruler before us, with many amiable and promising dispositions, had begun their career in life.’

xv. On the Sacrament of the Lord’s Supper, considered as a preparation for a good Life and a comfortable Death. Text, Matt. xxvi. 9. Serious, practical and pious. Dr. Blair considers the latter part of his text, ‘ *until that day when I drink it new with you in my father’s kingdom,*’ as indicating a recognition of each other after death. We transcribe this part of the discourse, as affording another example of the author’s attempt at the pathetic. P. 324.

‘ The expressions in the text plainly suggest a joyful intercourse among friends, who had been separated by death: and therefore seem to give much confirmation, to what has always been a favourite hope of good men; that friends shall know and recognise each other, and renew their former connections, in a future state of existence. How many pleasing prospects does such an intimation open to the mind! How much does it tend to compensate the vanity of life, and to mitigate the sorrows of death! For it is not to be denied, that one of the most bitter circumstances attending death, is the final separation from beloved friends.

This

This is apt equally to wring the hearts of the dying, and the surviving; and it is an anguish of that sort, which descends most deeply into the virtuous and worthy breast. When, surrounded with an affectionate family, and weeping friends, a good man is taking his last adieu of all whom he held most dear on earth; when, with a feeble voice, he is giving them his blessing, before he leaves them for ever; when, for the last time, he beholds the countenance, he touches the hand, he hears the voice, of the person nearest his heart; who could bear this bitterness of grief, if no support were to be ministered by religious hope? if there were no voice to whisper to our spirits, that hereafter we, and those whom we love, shall meet again in a more blissful land?—What higher view can possibly be given, of the benefit redounding from this divine institution, than its affording us consolation in such situations of extreme distress, by realising to our souls the belief of an immortal state, in which all the virtuous and worthy shall be reunited in the presence of their common Lord?"

xvi. On the use and abuse of the world. The general and diffusive manner in which this subject is treated, renders this Sermon less interesting, we think, than others. Text, 1 Cor. VII. 31.

xvii. On Extremes in Religious and Moral Conduct. A sensible, moral discourse, with some just delineations of character. Text, Prov. IV. 27.

xviii. The Doctrines and Precepts of Religion vindicated against Scoffers. A moral dissertation, but serious argumentative, and useful. Text, 2 Peter III. 3.

xix. The Creation of the World considered, as displaying in the Great Creator, supreme Power, Wisdom and Goodness. A pious and eloquent discourse. We present our readers with the conc'lusion. Text, Gen. I. I. P. 409.

Such, in general, are the effects which meditation on the creation of the world ought to produce. It presents such an astonishing conjunction of power, wisdom, and goodness, as cannot be beheld without religious veneration. Accordingly, among all nations of the earth, it has given rise to religious belief and worship. The most ignorant and savage tribes, when they looked round on the earth and the heavens, could not avoid ascribing their origin to some invisible designing cause, and feeling a propensity to adore. They are, indeed, the awful appearances of the Creator's power, by which, chiefly, they have been impressed; and which have introduced into their worship so many rites of dark superstition. When the usual course of nature seemed to be interrupted; when loud thunder rolled above them in the clouds, or earthquakes shook the ground, the multitude fell on their knees, and, with trembling horror, brought forth the bloody sacrifice to appease the angry divinity. But it is not in those tremendous appearances of power merely, that a good and well-instructed man beholds the Creator of the world. In the constant and regular working of his hands, in the silent operations of his wisdom and goodness, ever going on throughout nature, he delights to contemplate and adore him.

‘ This is one of the chief fruits to be derived from that more perfect knowledge of the Creator, which is imparted to us by the Christian revelation. Impressing our minds with a just sense of all his attributes, as not wise and great only, but as gracious and merciful, let it lead us to view every object of calm and undisturbed nature, with a perpetual reference to its Author. We shall then behold all the scenes which the heavens and the earth present, with more refined feelings, and sublimer emotions, than they who regard them solely as objects of curiosity, or amusement. Nature will appear animated, and enlivened, by the presence of its author. When the sun rises or sets in the heavens; when spring paints the earth, when summer shines in its glory, when autumn pours forth its fruits, or winter returns in its awful forms, we shall view the Creator manifesting himself in his works. We shall meet his presence in the fields. We shall feel his influence in the cheering beam. We shall hear his voice in the wind. We shall behold ourselves every where surrounded with the glory of that universal spirit, who fills, pervades, and upholds all. We shall live in the world as in a great and august temple; where the presence of the divinity, who inhabits it, inspires devotion.

‘ Magnificent as the fabric of the world is, it was not, however, intended for perpetual duration. It was erected as a temporary habitation for a race of beings, who, after acting there a probationary part, were to be removed into a higher state of existence. As there was an hour fixed from all eternity for its creation, so there is an hour fixed for its dissolution; when the heavens and the earth shall pass away, and their place shall know them no more.’

xx. On the Dissolution of the World. This excellent discourse consists chiefly of pious reflections and devout meditations. In its composition it is highly interesting; the language is eloquent, and the sentiments are often sublime. Text, 2 Pet. III. 10.

We transcribe a part of the practical improvement, which Dr. Blair makes on this awful subject.

‘ The inference which follows from what has been said on this subject, cannot be so well expressed as in the words of the Apostle, in the verse immediately following the text; *seeing that all these things shall be dissolved, what manner of persons ought we to be in all holy conversation and godliness?* Ought not the important discoveries which have been made to us, of the designs of the Almighty, and of the destiny of man, to exalt our sentiments, and to purify our life from what is vicious or vain? While we pursue the business and cares of our present station, and partake of the innocent pleasures which the world affords, let us maintain that dignity of character, which becomes immortal beings; let us act with that circumspection, which becomes those who know they are soon to stand before the judgment-seat of the Son of God: In a word, let us study to be what we would wish to be found, if to us the day of the Lord should come.

‘ I know it will occur, that the prospect of that day cannot be expected to have much influence on the present age. The events

of which I have treated, must needs, it will be said, belong to some future race of men. Many prophecies yet remain to be fulfilled. Many preparatory events must take place, before the world is ripe for final judgment.—Whether this be the case or not, none of us with certainty know.—But allow me to remind you, that to each of us, an event is approaching, and not far distant, which shall prove of the same effect with the coming of the day of the Lord. The day of death is, to every individual, the same as the day of the dissolution of the world. The sun may continue to shine; but to them who are laid in the grave, his light is finally extinguished. The world may remain active, busy, and noisy; but to them, all is silence. The voice which gives the mandate, *Return again to your dust*, is the same with the sound of the last trumpet. Death fixes the doom of every one, finally and irreversibly. This surely is an event which none of us can remove in our thoughts to a remote age. To-morrow, to-day, the fatal mandate may be issued. *Watch therefore; be sober and vigilant; ye know not at what hour the Son of Man cometh.*”

[To be continued.]

ART. XIII. *On the Abuse of Reason, as applied to the mysterious Doctrines of Revelation. A Sermon preached at the Primary Visitation of the Right Reverend the Lord Bishop of London, held at Colchester, May 17, 1790.* By Thomas Twining, M.A. Rector of St. Mary's, Colchester, and Chaplain to the Countess Dowager of Clarendon. 4to. 19 p. Pr. 1s. Cadell. 1790.

THE errors, into which human reason is in danger of falling when it is employed about the mysterious doctrines of revelation, here enumerated, are, the presuming to comprehend and explain such doctrines, the rejecting revelation on their account, and the misapplication of philosophy, in attempting to reduce all its doctrines to philosophical truth. Upon these points the writer discourses with a degree of good sense and precision which entitle him to particular attention. But though the general principles of this discourse be admitted in their full extent, it will still remain a question with many, whether Christianity does in fact teach any truths, which can properly be called mysteries, or require men to assent to any propositions, which reason cannot fully comprehend. The conclusion of the discourse we shall quote as a specimen of the judicious and candid manner in which it is written. P. 17.

“ Let not those abuses, to which human reason will ever be liable, indispose us to attribute to the improvement of science, the progress of true philosophy, and the general cultivation of knowledge, a considerable share in the production of these blessings.

“ Let us be thankful, that these improvements have strengthened the foundations of Christianity. New light has been thrown on the evidences, the doctrines, and even the morality, of the gospel; and much of this light we owe to the very efforts of its enemies to obscure

its glory. If reason has still its perversities and its errors, they are, happily, no longer such as inflame the passions of mankind, or lead on to intolerance and persecution. Men are ever more indulgent to the opinions of others, in proportion as they are more reasonable in their own.

‘ If there be any duty which it is incumbent upon us zealously to discharge, it is that of contributing, by every means in our power, to these advancements in the *religion*, the *reason*, and, in consequence, the *happiness*, of mankind. This is a zeal that cannot be intemperate; a zeal, not for a vestment, a day, an idle ceremony, or a disputable opinion—but, a zeal to promote the welfare, temporal and eternal, of our fellow-creatures, and, in so doing, to concur with the gracious views of that merciful Being, who sent his Son, to guide our feet into the way of peace.

‘ To this great end we cannot more effectually contribute, than by a proper and *cautious* application of our reason to that religion which is our “ *reasonable service*. ”—Thus, only, will Faith and Reason, which the perverseness of man, not the nature of things, has set at variance, be perfectly united; and Philosophy, which is THE LOVE OF WISDOM, become, at length, the firmest friend and associate of THE WISDOM THAT IS FROM ABOVE.’

ART. XIV. *The Influence of Conscience, and the Credibility of a future State of Retribution, considered; being the Substance of Two Discourses, delivered in the Cathedral Church of Winchester, at the Lent and Summer Assize of the present Year 1790; the former on March 3, before the Hon. Sir Beaumont Hotham, Knt. and the Hon. Sir Richard Perryn, Knt. Barons of his Majesty’s Court of Exchequer. The latter on July 15, before the Hon. John Heath, Esq; one of the Justices of his Majesty’s Court of Common Pleas; and the Hon. Sir Nash Grose, Knt. one of the Justices of his Majesty’s Court of King’s-Bench. George Dacre, Esq; High-Sheriff.* By L. M. Stretch, A. M. Vicar of Twyford and Owlesbury, and Chaplain to the Sheriff of the County. 4to. 37 p. pr. 2s. Cadell. 1790.

THE important topic of Conscience, the foundation of its authority, and its powerful influence upon the actions of men, both as private individuals, and as members of society, are in this discourse treated with great perspicuity and energy. The style in which it is written is equally remote from abstract refinement and from mystical obscurity: the whole is well adapted to produce an impression upon the minds of the audience suitable to the occasion on which it was preached.

ART. XV. *A Sermon preached at St. George’s Chapel, Stonehouse, before the Society of Free and Accepted Masons, on Tuesday Evening, Sept. 28, 1790, being the Time appointed for the Interment of his late Royal Highness the Duke of Cumberland, Grand Master of England.* By J. Bidlake, A. B. Chaplain to his

his Royal Highness the Duke of Clarence. Published at the Request of the Society. 4to. 15 p. pr. 1s. Law. 1790.

THIS correct and elegant discourse, is in all respects worthy of the solemn occasion upon which it was preached. To this writer the public are indebted for an interesting *Elegy on the author's revisiting the place of his former residence*, first published without his name. See our Review, Vol. III. p. 76.

ART. XVI. *The Ocean; Displays of the Divine Perfections in it; and the Moral Instructions to be derived from it: A Sermon, delivered at Great Yarmouth, Norfolk, September 21, 1790.* By Samuel Neely. 8vo. 43 p. pr. 6d. Robinsons. 1790.

THE history of nature is so obviously connected with theology, and so easily applied to illustrate and confirm its principles, that it is astonishing it is so seldom resorted to as a fund of interesting topics of discourse for the pulpit. This sermon affords no unpleasing specimen of the use which preachers might make of the knowledge of nature. The writer has enumerated many particulars respecting the ocean, which serve to illustrate the wisdom and goodness of God; and suggested several moral and devotional instructions, deduced from an analogical view of this region of nature. On this latter part of the plan, which is not unexceptionable, the author has indulged some latitude, but by no means to that ridiculous extreme, to which this kind of spiritualizing was carried by many puritanical writers of the last century.

ART. XVII. *The Causes of the Inefficacy of Public Instruction, considered in a Sermon preached at the Ordination of the Rev. David Jardine, at the Unitarian Chapel, Bath, February 25, 1790, by the Rev. John Prior Estlin; with an Address on the Design of Ordination, by the Rev. Thomas Wright: Mr. Jardine's Replies to the Questions proposed to him; and a Charge, by the Rev. Thomas Belfham.* 8vo. 98 p. pr. 1s. 6d. Johnson. 1790.

IT would be unreasonable to expect any great degree of novelty in a kind of service, of which so many specimens have already appeared. But it would be injustice to the present publication not to say, that it uniformly bears the character of good sense, moderation, liberality and piety, and contains many important observations on the nature of the Christian ministry, and the duty of ministers and people, which may be read with advantage by Christians of every denomination. The Sermon, with much propriety of thought, and simplicity of language, explains the causes which obstruct the natural effect of public preaching, both on the part of ministers and people. The

Address

Address states clearly the ground on which ordination is at present conducted by Dissenters; the Replies explain with much modesty the young preacher's views in undertaking the office; and the Charge abounds with excellent advice, and discovers a judicious and manly turn of thinking.

ART. xviii. *The Nature of the Gospel as stated in the Writings of St. Paul. A Sermon, preached at the Visitation of the Arch-deacon of Norwich, held at Litcham, May 10, 1786.* By John Venn, M. A. Rector of Little Dunham, Norfolk, and Chaplain to Viscountess Dowager Hereford. 8vo, 16 p. pr. 6d. Deighton. 1790.

THE doctrine of this discourse is, that obedience is *not* the cause of our justification, or the foundation on which our hope of salvation is built. Those readers who wish to be informed of the grounds of this doctrine, so long and warmly maintained by the followers of Calvin, must be referred to the sermon.

ART. xix. *An Exhortation to devout Behaviour in the Church, during the Time of Divine Service. A Sermon.* By the Rev. J. Twentyman, Vicar of Castle-Sowerby, Cumberland. 8vo. 24 p. pr. 6d. Longman, &c. 1790.

BESIDES the characters of plainness and simplicity, so desirable in popular discourses, this sermon has the merit of being *peculiarly seasonable*.

ART. xx. *An Admonition upon the Nature, Propriety, and Advantages of Confirmation.* By the Rev. T. Hunter, Vicar of Weverham, in Cheshire, and Chaplain to his Grace the Duke of Athol. 12mo. 24 p. Pr. 3d. Johnson.

IN this ingenious defence of the office of confirmation, the author maintains it to be of divine appointment, and to be useful and even necessary, to render baptism complete, to discharge godfathers and godmothers from their obligations, and to give young people an opportunity of being more perfectly instructed in the knowledge of Christ, and in the way of Salvation. The piece, which is written upon orthodox principles, contains much good advice to young persons.

ART. xxi. *A Manual of Prayers for several Occasions.* By Joshua Toulmin, M. A. 12mo. 24 p. pr. 3d. Johnson. 1789.

WRITTEN with great plainness, upon the most simple principles of religion, and therefore well calculated for the use of the common people.

ART.

ART. XXII. *The Fundamental Principles of the Established Church, proved to be the Doctrine of the Scriptures; an introductory Discourse, preached March 7, at Debenham in Suffolk, after reading the Thirty-nine Articles.* By William Hurn, Vicar of Debenham, and Chaplain to her Grace the Duchess Dowager of Chandos. 8vo. 39 p. pr. 9d. Matthews. 1790.

THIS preacher, who professes to teach sound doctrine, pronounces the poor Arian, who trusts to what is not Jehovah, shipwrecked on the coast of Christianity, and in danger of going to the bottom under a most fearful curse! How is this consonant to that *sound doctrine* which saith, ‘ Judge not that ye be not judged.’

ART. XXIII. *Free Thoughts on the Death threatened against Adam in Case of Disobedience, and the Sentence passed on him; on the Extent of Salvation; and on Predestination.* Also, *Strictures on a Pamphlet, entitled, ‘ An Address to the serious and candid Professors of Christianity, &c.’ and on Mr. S. Rowles’s ‘ Defence of Necessity and Reprobation.’ The whole comprised in three Letters to a Friend.* By John Golledge. 12mo. 47 p. pr. 6d. Johnson. 1790.

IN opposition to the doctrine of the Calvinists, it is maintained in these letters, that the death threatened to Adam, implied the entire destruction of the whole man, and the redemption purchased by Christ, the restoration of all mankind to the hope of everlasting life. We recommend the piece to the perusal of those who have been accustomed to think, that vilifying human nature is glorifying God.

ART. XXIV. *A Vindication of speaking openly in Favour of Important Truths, especially those respecting the Diviae Unity.* 12mo. 17 p. pr. 2d. Johnson. 1790.

A FAMILIAR address to those who are offended at the freedom with which the doctrine of the Trinity has lately been attacked, very well adapted to justify, and to promote among the common people, a spirit of free enquiry.

ART. XXV. *Socinian Blasphemy Exposed: or the Confutation of Error, and Triumph of Truth.* Being a Set of Dialogues, in which the principal Characters are Dr. Phlogiston, Mr. Musulman, and Mr. Refiner, on the one Part, and Mr. Anvil, Mr. Burnisher, and Mr. Plater, on the other. 12mo. 16 p. pr. 2d. Matthews, 1789.

HEY-DAY! Blasphemy! we thought this language, had in these enlightened and polished times, been extinct, or only heard within the cloisters of the inquisition; but let not the reader be

be terrified at the horrid sound; it is only an harmless cry at the door of an ale-house, [Conference II. Scene, alehouse,] to invite the neighbours to come in, and hear some merry talk over a pot of ale, against Dr. Priestley, and in favour of the Methodists.

ART. XXVI. *The Friendly Conclusion: Occasioned by the Letters of Agnostos, to the Rev. Andrew Fuller, respecting the Extent of our Saviour's Death, and other Subjects connected with that Doctrine; in four Letters to a Friend.* By D. Taylor. 12mo. 27 p. pr. 3d. Ash, &c. 1790.

THIS pamphlet has several excellencies: it is short; it is cheap; it is the *conclusion* of a theological controversy; and it is a friendly conclusion.

ART. XXVII. *The Unitarian, Arian, and Trinitarian Opinion respecting Christ, examined and tryed by Scripture Evidence alone, in a Method hitherto unattempted.* By William Ashdowne. 8vo. 37 p. pr. 1s. Johnson. 1789.

THE ground which this writer, who is an advocate for the Unitarian doctrine, takes in defence of his system is, by comparing those passages in the New Testament wherein Christ is spoken of under various appellations by his forerunner, by himself, and his prophets, with those in which the expected Messiah, is spoken of by the Jews; to prove, that none of these appellations have any reference to his pre-existence, or to a union of the divine and human nature. The argument, which is stated in a plain and unaffected manner, would have appeared before the reader with greater clearness, had the writer given his scripture-quotations at length.

ART. XXVIII. *True Heavenly Religion restored, and demonstrated upon Eternal Principles: with a Call to Christians of higher Sense.* By a Philosopher of the North. 12mo. 138 p. pr. 2s. 6d. Johnson. 1790.

‘THERE is nothing, (saith Solomon,) new under the sun.’ What! not Swedenborgianism?—No. If its principles be analysed, it will be found to be nothing more than a repetition of the mystical doctrine of Plato concerning the abstract contemplation of the First Good, Intellect, and the World of Ideas, and of the whole train of antient and modern Theosophists, who have imagined themselves capable of seeing a bright ideal world, of which the visible world is only an obscure image, of conversing with superior natures, and even of rising to the actual vision of God.

According to this *Philosopher of the North*, the true heavenly religion is not found in ‘vain and perishable sounds and words,’ ‘the dead letter of external scripture; nor does it rest upon the evidence

evidence of miracles,' which depend upon 'frail human authority,' and which are, 'only for fools, for men still brutes, still savage ;' it is the principle or living idea, of that divine order, which unites heaven and earth, God and man. From the idea of order, necessarily follows that of the existence of an infinite being, from whom, to the least atom, there must be a constant chain of being, including all possible varieties and gradations. The universe may be conceived, as an infinite line or number from God as its first indivisible or unity, or as an immense circle from God as its center. In the divine order there must be an immense variety of spirits ; *higher*, up to the splendor of God ; *lower*, down to the night of abyss. Thus all that can be *conceived*, must be believed *to be*. And as the divine order is immense in existence, so also in action : the first action arising from God the eternal sun of the universe, whence there must be, visibly and invisibly, an immensity of power. In this order no shade of evil can be seen. There is a divine language in this order, in which every mind may read God, heaven and nature revealed. The idea of this order is religion, the truth of heaven. The common vulgar religion is that system of absurdity from whose horrid gloom have sprung all sects, that *human devilism* of a despotic faith. In this plan or idea of divine religion, divinity, that never could pretend to the shadow of a demonstration, becomes for the first time a science.

Such is the substance of the *True Heavenly Religion restored*. If it be fairly brought out of the mist of words in which it is involved, what is it, but an acknowledgment of the existence of God, deduced from the order of nature ? and what is Swedenborgianism, stripped of its mantle, but, simply, natural religion ? Why then all this boast of a new religion ? and why is Emanuel Swedenborg to be followed as a second Messiah ? M. D.

ART. XXIX. *The Necessity and Duty of the early Instruction of Children in the Christian Religion, evinced, and enforced : in a Sermon, preached in the Parish Church of Great Yarmouth, on Sunday, June 20, 1790, for the Benefit of the Charity and Sunday Schools. Printed at the Request of the Representatives in Parliament for that Burgh, and published for the Benefit of those Schools. By Samuel Cooper, D. D. 4to. 23 p. pr. 1s. Robinsons. 1790.*

THE first part of this sermon is intended to establish the orthodox doctrine of the fall of man, and the original inherent depravity in all human beings from that circumstance. For this the remedy is the ' bringing children up in the nurture and fear of the Lord ;' and, from this topic, the preacher takes occasion to recommend charity and sunday schools. C.

ART.

ART. XXX. *Report of the Committee of the Highland Society of Scotland, to whom the Subject of Shetland Wool was referred. With an Appendix, containing some Papers drawn up by Sir John Sinclair and Dr. Anderson, in Reference to the said Report.* 8vo. 81 p. Pr. 2s. Edinburgh; Creech; London, Cadell, &c. 1790.

THIS report relates to a subject of very great importance; and we shall make such brief extracts from it, as, consistent with our plan, may explain the motives of the Highland Society, and the hopes to be derived from their labours. The sheep in Shetland are estimated at rather more than one hundred thousand: their fleeces, averaged, do not produce above a pound and a half of wool each; which, at the present price of six-pence per pound, amounts only to 325*l.* whereas the finest wool might fetch at least *five shillings* per pound. If the same breed were reared in the Hebrides, and in the Orkney islands, wool might be produced in these neglected parts of Great-Britain to the value of perhaps half a million, and the breed might be extended to other parts of the kingdom, although the fine woolled sheep succeed best in remote parts of the country, and least near the metropolis; for in proportion to the fineness of the wool, the value of the carcass is diminished. The Spanish breed of sheep might also be introduced; and were the importation of Spanish wool prohibited, it would soon become of more consequence to attend to the fleece in every part of the kingdom. These remarks open to us the importance of the subject. What particularly concerns the wool of the Shetland sheep may be seen in the following extract from the report, p. 4.

‘ 1. It would appear that there are two kinds of sheep, producing fine wool, to be found in these islands: one, known by the name of the *kindly sheep*, whose whole body almost is covered with it; another, whose wool is fine about the neck only, and other particular parts of the body. The colour of the fine wool also varies, sometimes being of a pure white, which is supposed to be the softest and most silky, at other times of a light grey, sometimes of a black, and sometimes of a russet colour.

‘ 2. The sheep producing this wool are of a breed, which, for the sake of distinction, might be called the *beaver sheep*; for, like that animal, many of them have long hairs growing amongst the wool, which cover and shelter it; and the wool is a species of fine fur, resembling down, which grows in some measure under the protection of the hair with which the animal is covered.

‘ 3. Your committee understand, that the sheep producing this fine wool are of the hardiest nature; are never housed, nor kept in any particular pasture; and that in the winter season they are often so pinched for food, that many of them are obliged to feed upon the sea-ware driven upon the shore. It is observed, however, that the healthiest sheep are those which live constantly upon the hills, and never touch the sea-ware.

4. Lastly, it appears that the Shetland sheep are never clipt or shorn, but that, about the beginning of June, the wool is pulled off, (which is done without the smallest pain or injury to the animal) leaving the long hairs already mentioned, which shelter the young wool, and contribute to keep the animal warm and comfortable, at a season of the year when cold and piercing winds may occasionally be expected in so northern a latitude*.

Your committee have the satisfaction of adding, that they have reason to believe, that some remains of the same breed of sheep may still be found in the Western Islands, and perhaps in some of the remotest parts of the Highlands, where the native race of the mountains have not been contaminated by a connection and intercourse with animals of an inferior species in regard to the quality of their wool, and valuable principally for their carcass.

The committee proceed to state some circumstances, which render an immediate attention to this subject absolutely necessary. These are, chiefly, the neglected state of the Shetland sheep, from the proprietors of the islands directing their labours principally to fishing, whereby the several species of the sheep are mixed and confounded, and some of the most valuable likely to be extinct. Sheep, too, have been brought to Shetland from the southern parts of Scotland, which could not improve the Shetland breed, and unfortunately introduced a distemper, by which many perished. Inattention and ignorance also seem to be no inconsiderable obstructions. The following circumstance is singular.

As a proof how little the real value of the Shetland wool is known in that country, your committee thought it adviseable to have the following experiment tried. They directed some of the coarse Shetland stockings, sold at Edinburgh for about 5d. per pair, to be purchased, and *decomposed*, or reduced again to wool. The wool, after being carded, was delivered to Mr. Izet the hatter, who very obligingly agreed to try how far it might answer for the manufacture of hats, both by itself, and with a mixture of other wool. The strength of the wool, it is evident, must have been much injured by being spun and knit, and afterwards untwisted and decomposed; yet the wool was found capable of being made into hats; and there is reason to believe, that the raw material was more valuable than the stockings when manufactured.

The report concludes with certain propositions or plans for promoting the growth and manufacture of Shetland wool. For these we refer to the pamphlet. The appendix consists of an account of the experiments made by M. le Blanc, for improving the quality of wool in France, extracted from the *Tableau General du Commerce, par M. Gournay. Memorial concerning the improvement of Highland wool, by James Anderson, L.L.D.*

* It is said that these long hairs come off later in the season, towards the end of September.

Hints for awakening a spirit of industry in the Highlands, and proposals for establishing markets for wool in that part of the kingdom, and other papers and remarks; from the whole of which, it clearly appears, that a vast benefit would result to the nation from the cultivation of our fleeces. Much praise is due to the industry and patriotism of Dr. Anderson and Sir John Sinclair, who appear to have prosecuted the subject with zeal, and to whose labours the public are in a great measure indebted for the present valuable communication.

ART. XXXI. *The Corn Trade of Great-Britain, for eighteen Years, from 1748 to 1765, compared with the eighteen years from 1771 to 1788, shewing the national Loss in the latter Period to have been about Twenty Millions of Money.* By Robert Rayment, Esq; 8vo. 56 pages. Price 1s. 6d. Whieldon. 1790.

THIS author bestows much sensible reasoning, and many accurate calculations in the refutation of that popular idea, that 'corn enough is grown for the consumption of the inhabitants of Great-Britain, and in good seasons, enough for the consumption of two or three years.' Indeed, we have always been of opinion that the high price of bread only, is a sufficient refutation of this nation; let corn grow as it may in this country, such is the defect in our laws, that the abatement of price to the poor is never so much as to afford them what deserves the name of cheap bread. In this respect, the policy has been to feed Europe, and starve ourselves. Hence the neglect, and we may almost say, the inutility of agriculture, unless for exportation.

It is impossible for us to follow our author step by step through his various calculations: we shall therefore state only the gross sums.

Wheat. On the importation and exportation of wheat in the eighteen years from 1748 to 1765, there remained a neat profit to this country of 8,569,254 l. 10s. 3d—and in the eighteen years from 1771 to 1788, a loss of 11,499,051 l. 4s. 1d.

Barley and Malt. In the first eighteen years, a net profit of 4,045,851 l. 17s. 2d. and a loss in the latter eighteen years of 3,461,338 l. 13s. 6d.

Oats and oatmeal—During the first eighteen years, a loss to the nation of 172,624 l. 17s. but during the last eighteen years, a loss of 3,941,187 l.

Rye. Profit to the kingdom on the first eighteen years 762,104 l. 3s. and the loss in the last eighteen years amounted to 318,324 l. 10s. 2d. which added, make the difference 1,080,428 l. 13s. 2d.

Beans

Beans and Pease. The loss to the kingdom in the last eighteen years only is calculated here, and amounts to 234,059*l.* 3*s.* 8*d.*

After thus proving the increasing loss to the nation, by the importation and exportation of grain, and by the bye our author says nothing of the exportation of grain in a manufactured state, i. e. beer, &c. he proceeds with a train of reasoning calculated to show the impropriety of our present system of corn laws. He is clearly of opinion that the corn laws of this country should undergo a total change; no half measures, or temporizing schemes will do. Among other things that should be done, two he thinks highly necessary; one, to open inland water communications from the capital, to all the corn counties where such communications can be effected; the other, to suffer no common field-land, on any pretence, to be inclosed. Upon the whole, this pamphlet is entitled to the public attention. The subject is important, and the manner in which it is here handled, candid, sensible, and apparently accurate. c. c.

ART. XXXII. *The Hop Officer's Directory in charging the Duty; or Planter's Assistant: shewing by Inspection the whole Duty on Hops, from one Pound, regularly and successively, to a Ton weight of that Commodity: and calculated upon Principles, so as neither to injure the Revenue, nor to oppress the Planter.*
By Samuel Rogers, Philo. Math. 12mo. 46 pages.
Price 1*s.* Stalker. 1790.

THIS Directory, or Assistant, as it is called, is dedicated to the commissioners of excise, and consists of one continued table or calculation, which will no doubt be found useful to those concerned, either in collecting or receiving the duty on hops. But the author strangely mistakes the principles of his calculations, when he insinuates them to be such as will preserve the revenue from injury, or the subject from oppression; which can never in any degree be the case, unless the knowledge of simple arithmetic were a rare accomplishment, and Mr. Rogers had been the first to inform the hop-growers and excisemen, how to calculate a duty of one penny per lb. with fifteen per cent added thereto, on a neat weight less by one-tenth than the gross weight. In his future title pages let him learn to call his principles no other than what they are—the plain rules of arithmetic: by this means he will not disappoint those who consult him, by raising false expectations of his performance. 8.

ART. XXXIII. *Carmen Sæcu'are, &c. A Secular Ode on the French Revolution. In Latin and English.* 4to. 12 pages.
Pr. 1*s.* Johnson. 1790.

THIS elegant production reflects as much honour on Dr. Geddes's feelings as a man, and on his liberality as a Catholic, VOL. VIII. A a 25

as it assuredly does on his taste and skill as a poet.—Of these observations two short extracts will be sufficient to convince our readers.

• *Gaudeant cives periisse totam
Diram et audacem dominationem ;
Gaudeant ferrugineas catenas
Fulmine fractas.*

*Gaudeat clerus, jubiletque fese,
Liberum cura et mediocritate
Divitem, sacris modo rite posse
Dedere rebus.*

*Gaudeant ipsi, generosa pubes
Nata præclaris atavis, et exhinc
Creditent solam meritis parari
Nobilitatem.*

• *Frenchmen, rejoice ! The heavy galling yoke
Of daring domination is no more :
Your adamantine chains at length are broke,
And your Egyptian servitude is o'er.*

*Rejoice, ye Ministers of the Most High ;
That, freed from all those cares which Mammon brings,
And blefs'd with golden mediocrity,
Ye can devote your lives to holy things.*
*Rejoice, ev'n Ye, who boast a noble birth ;
(Vain, idle, foolish boast in Wisdom's eye)
And henceforth learn to know, that nought on earth,
But worth and virtue, makes Nobility.*

— — — —
• *Nec satis, solos jubilasse Gallos :
Canticum, audenter, repeatant Iberi ;
Consonent Belgi, Batavi, Allemanni,
Helvetiique.*

*Albion ! sed te potiore plausu
Liberos Gallos decet æmulari ;
Æmulans Gallos, tibi gratularis
Terra Brittanna !*

*Inclyti Heroes Runimedis agri,
Qualis, O, vobis stupor atque sensus ?
En ! magis clarum Runimedis agro
Cernitis agrum !*

• *Nor is't enough, that France alone rejoice :
Let Spaniards boldly echo back the sound ;
Let priest-rid Flemings hear the sacred voice ;
Germans, Italians—all the nations round !
But, Britons ! ye should raise the loudest note,
For Freedom granted to a sister state :
While ye, with France, this day to joy devote,
Britons ! yourselves ye do but gratulate.*

Immortal heroes of that famous field,
Where was atchiev'd the great, the glorious DEED !
What was your wonder, when ye, late, beheld
A Field more famous, ev'n than *Runimedē* ?

Our learned readers will perhaps think, that the English version is inferior in elegance to the Latin. It is however very literal, which was probably the first object of the author.

ART. XXXIV. *Epistola Macaronica, &c. A Macaronic Epistle [occasioned by the Meeting of the Friends to the Repeal of the Corporation and Test Acts at the London Tavern in February last] with an English Version, for the Use of the Ladies and Country Gentlemen.* 4to. Pr. 1s. 6d. Johnson. 1790.

* A friend having favoured the author with an *English version*, or rather with a second *original* (for it can hardly be called a mere *translation*) it has been subjoined, in this edition, for the benefit of the ladies, and country gentlemen.—Farewell.

As Reviewers, we beg to add our acknowledgements to those of the ladies and country gentlemen for the spirited and agreeable translation which accompanies this second edition * of our old and pleasant acquaintance the Macaronic Poem. As we formerly presented our readers with a few extracts from the original, it will be the best commendation of the translation on this occasion to produce a specimen :

* At London's famed Tavern, in Bishopsgate-street,
Where London's good citizens frequently meet
To eat and to drink—and, sometimes to dispute !
Three Hundred Dissenters, all men of repute,
Imagine assembled ; the prime and elect
Of ev'ry dissentient Protestant sect :
Those, who relish the tenets of daring Socinus ;
Those, to whom the Clarke-Arian doctrine divine is ;
Those, who still the dark myst'ries of Calvin defend ;
And those, who for second immersions contend :
All, in short, who believe they have cause to complain
Of Statutes unjust, and of Test-oaths profane ;
While churchmen in ease and in luxury live,
And grasp ev'ry gift that the nation can give !

* Keen, keen were we all, or to speak, or to fight,
For what we conceived to be every man's right.
Th' heroic Beaufoius appear'd at our head,
As ready as ever the phalanx to lead.
The grave and grim alderman Sawbridge was there,
And the hard-coloured visage of Serjeant Adair,
Pale Burgoyne, and stout Watson with stentor-like voice,
And Jeffries, our chair-man—most worthy our choice.
By him sat the MAN, who was born to maintain
Undefiled and inviolate Liberty's fane ;

* For our account of the first edition, see vol. vii. p. 91.

The Man, the man only, in whom we admire
Demosthenes' force and Demosthenes' fire;
The man, whom alone not the wearers of crowns
Can draw from his duty by smiles or by frowns!
Shout, citizens, shout; let the plaudit go round,
Till pillars and portals re-echo the sound.

• Nor can I in silence pass over some others;
Brand-Hollis, Hayward, and the Thornton brothers;
Shore, Milford, young Towgood as tall as a steeple;
Sly Toulmin, accustom'd to sneer at the people;
And Him with a hard flinty name †—but whose heart
Is as soft and as sweet as a Damascene tart;
With Payne, whom the learned, by fair calculation,
Find fully predicted ‡ in John's *Revelation*!

• What need I, my Brother, what need I to name
Our clerical gentlemen, blazon'd by fame?
Biographical Kippis, Cyclopedic Rees,
And Tow'r's—with his spectacles on, if you please—
Good Lindsay so sober, severe and sedate;
And Belsham * (what pity!) the slave of blind fate;
Sweet Disney, in manners and morals refin'd;
And Price, the benevolent friend of man-kind.

• What kept you, my Priestley, from gracing our dome?
A better employment detains you at home:
Where you fabricate bolts, and you meditate blows
At Horsley, and Horne, and Hawkins, and Howes;
And tons of sulphureous powder † prepare
To blow up the church, and church-men in the air?

We are sorry that our limits will not allow of our inserting
the bill of fare, which we must allow to be at least an excellent
metaphorical regale.

D.

ART. XXXV. *Bibliotheca Parisiana. A Catalogue of a Collection of Books, formed by a Gentleman in France, not less conspicuous for his Taste in distinguishing, than for his Zeal in acquiring, whatever, of this Kind, was most perfect, curious, or scarce. It includes many first Editions of the Classics; Books magnificently printed on Vellum, with illuminated Paintings; Manuscripts on Vellum, embellished with rich Miniatures; Books of Natural History, with the Subjects coloured in the best Manner, or with the original Drawings; and Books of the greatest Splendour and Rariness in the different Classes of Literature. To these are added, from another grand Collection, se-*

† Mr. Stone.

‡ This alludes to a gentleman's having, by way of joke, found in the name of John Augustus Payne the Apocalyptic number of Anti-christ, 666.

* Mr. Belsham is a Necessarian.

† Metaphorical powder only.—See his letter to Mr. Pitt.

lected

selected Articles of high Value. The Whole are in the finest Condition, and in Bindings superlatively rich. They will be sold by Auction, in London, on Monday the 26th of March, 1791, and the five Days following. To be viewed the Week preceding. Catalogues to be had of Mr. Edwards, No. 102, Pall Mall, London; of Mr. Laurent, Rue de la Harp, Paris; and of the principal Booksellers throughout Europe. Printed on Vellum Paper, small 8vo. 164 p. Pr. 2s. 6d. Edwards. 1790.

To the enterprizing spirit of Mr. Edwards, the literati of this country are eminently indebted; for he has distinguished himself in amassing the literary treasures of other countries, and transferring them to his own. The collection here offered the public is such as has never been rivalled; and, we doubt not, that large as the sum is, at which it was bought, the purchaser will be amply requited.

To the catalogue is prefixed the following preface.

‘ The collection exhibited in this catalogue is, for its number, by far the richest and most valuable ever offered to the public. When the difficulty of acquiring objects so much surpassing the usual style of books, is considered, it becomes a wonder how the life of one person should have been competent to such an assemblage! Of these, many are but very rarely, and after the most assiduous research, to be found; and when found, not to be obtained but at unbounded expence; whilst others among them are really *unique*.

‘ Not a few of this collection may be considered as specimens of what the munificence of sovereigns could produce, when the embellishments of literature constituted their favourite relaxations, and where artists of the greatest talents were stimulated to exert them. Such, among others, are the numbers remarked as belonging to the library of *Claude d'Urfé*, originally formed by the accomplished *Diana of Poitiers*; who availed herself of the devotion of two kings of France, to enrich her own library with the choicest treasures of theirs.

‘ An opportunity like this, which now offers itself to amateurs in general, as well as to royal and public libraries, it is morally impossible should ever return. Let it be remembered, that to acquire a few only of such books as give celebrity to a library, requires a coincidence of diligence and good fortune, combined with much time and expence; and the articles here inserted, are generally of that description.

‘ In the notices interspersed, I have confined myself to the particulars least known; premising, however, that the books which may be looked upon as shades in this catalogue, are studiously brought forward to distinguish others. It must also be observed, for the information of those who may be strangers to the unequalled care, taste, and expence with which these books were collected, that most of them were bound by *De Rome*, who was liberally encouraged by Mr. Paris to exert his utmost skill in adorning a library so exquisite and matchless.

J. EDWARDS.
Where

Were we to attempt to gratify our readers, by pointing out all the curious books, we must nearly reprint the catalogue at large. Some, however, for immediate gratification, we will insert.

• *The Vulgate Bible*, printed at Venice by Jenson, 1476, 2 vols. fol. on vellum, with painted initials and miniatures. But one other copy of this book is known upon vellum, and that greatly inferior.

• *The Bible of Pope Sixtus the Fifth*, 1590. This superb copy, the only one known on large paper, sold at the sale of M. de Limare for 50l. 8s. 4d.

• *Biblia Pauperum*; a complete and beautiful copy of the greatest typographic curiosity, as it exhibits the first essay towards the art of printing.

• *Epitome passionis Jesu Christi*. MS. on vellum, with miniatures and 17 fine paintings, in the most exquisite style of finishing, probably executed by Albert Durer, or some of his scholars.

• *Father Simon's Critical History of the Old Testament*, which was suppressed by a council of state, and all the copies destroyed save six.

• *Officium beatae Mariae Virginis cum Calendario*. Of this book it is remarked, that besides the great merit of the miniatures, which render it one of the richest of its kind, it has the further merit of having belonged to Francis the First, each page of it being adorned with his cypher and device.

• *Mich. Serveti de Trinitatis erroribus Libri Septem*. 1531; *ejusdem Serveti de Trinitate dialog. lib. duo*, &c.

• *Spaccio de la Bestia triomfante*, &c.

• *La Cena de la Ceneri*, &c.

• *Plantes Peintes en miniature, par Aubriet*. A work of exquisite beauty, bought at the sale of Mr. Limare for 50l.

• *Flowers upon vellum*, by *Rabel*. The performances of this artist suggested to Colbert the idea of that immense collection of drawings which he began, and which has since been continued, in the collection of the kings of France.

• *Chinese Paintings and Drawings, exhibiting the culture and gathering of rice, tea, &c. &c.* Two different collections of considerable value.

• *A Collection of Birds*, painted by *Cl. Aubriet*, sold also at M. de Limare's sale for 104l. 3s.

• *Hist. Naturelle des Oiseaux*, par *Buffon*, with plates, purposely coloured, and at an extraordinary expence.

• *Paintings of various Subjects in Natural History*, by *AGRICOLA*. This collection is esteemed the greatest masterpiece of this branch of art. It consists of 26 pictures, which were purchased separately at considerable expence.

• *Histoire Naturelle du Cabinet de Seba*. 4 vols. cuts, coloured.

• *Ficheti Rhetorica*, 1471, on vellum; the first book printed in France.

• *Quintilian*, 1470; the first edition.

• *Virgilius, Aldi* 1501; printed on vellum, with miniatures.

• *Valerius Flaccus*, 1474; the first edition.

• *Manilius*,

- ‘ *Manilius*, 1474; the first edition, and so scarce that many have denied its existence.
- ‘ *Ausonius*, 1472; the first edition.
- ‘ *Petrarch*, by *Aldus*, on vellum, with 182 exquisite miniatures, by *Julio Clovis*.
- ‘ *Boccacio*, 1470, and *Masuccio il Novellino*, 1476.
- ‘ *Collectiones Navigationum in Indian Orientalem & Occidentalem*, 25 Partibus cum fig. a *De Buy* & additionibus, 60 vols. the complete extant.
- ‘ *Quintus Curtius*, 1470; the first edition. This copy belonged to Prince Eugene.
- ‘ *Cæsaris Commentaria*, 1469; the first edition, and a most splendid copy.
- ‘ *Taciti Annales*, 1468; the first edition; Prince Eugene’s copy.
- ‘ *Les Grands Chroniques de France*, (vulgairement dits de Saint Denys,) 3 vols. 1493, most sumptuously printed on vellum, and enriched with 953 historical paintings.
- ‘ *Croniques de Froissart*, 4 vols. printed on vellum.
- ‘ *Pierres Antiques gravies du Duc de Marlborough*.
- ‘ *Baths of Titus*, with 61 coloured drawings, by *Carloni* of Rome.

We have observed a mistake in the note to No. 367, where the *Supplemental Advertisement to Jarvis's Don Quixote* is ascribed to *Warton*, instead of *Warburton*.

To CORRESPONDENTS.

IN our Review for April last, we thought it our duty to remark—speaking of the *Paston Letters*—that the printing them a second time at large, for the sake of exhibiting their contents in a *modernized* form, discovered somewhat of *author-craft*. At this Sir John Fenn professes himself hurt; but though we cannot but think the expedient there suggested would have fully answered his purpose, yet it is with pleasure we insert his defence.

* To the REVIEWER of the HISTORICAL DEPARTMENT in the ANALYTICAL REVIEW.

‘ SIR,

‘ I DID not till yesterday know that the third and fourth volumes of the “Original Letters of the Paston Family” had been reviewed in your Analytical Reviews for March and April last; and however obliged I am to you for the terms in which you have spoken of my arrangements, observations, and notes, I cannot help feeling uneasy at the charge of *author-craft* placed there to my account, for having twice printed each Letter, once in its original form, and again in a modernized one.

‘ I do most sincerely assure you, that the price for which the books might sell made no part of my consideration on that head. It originally proceeded from the advice of some of the most able and learned antiquaries and historians of the present time, whom I have the honour to rank in the number of my friends, that that method was adopted. The reasons (which I have given in the preface to the first volume

more

more at large than I can do here,) were these; those gentlemen, on the part of themselves and others, whose studies had been directed that way, wished for an exact transcript of each letter, as to its mode of spelling, contractions, pointing, &c. &c. ; this, they were sensible, to those who read merely for the history and anecdotes contained in the Letters, would be a constant and unpleasant stumbling-block, and, on that account therefore, they recommended the repetition in the method used in the books.

‘ On these authorities I adopted the plan, and from every publication which I have seen, and from the various communications which I have had with readers of every description, I found no cause to be dissatisfied with it, till I saw your accusation.

‘ I have always considered myself as the humble editor only of a work, which has received perhaps much more of the public favour than my share of it has entitled me to place to my own account.

‘ Though the subject-matter was prepared to my hands, it was not mine without both expence and trouble; the original difficulty also of decyphering that matter, with the constant perplexity of chronological arrangement, took up much time, and (I make no doubt but you will allow) some attention.

‘ The expences of publication, including the engraving and colouring of the plates, have been very high; the profits to myself upon these volumes very moderate; but had they been still more moderate, I should have made no complaint.

‘ I am therefore very sorry to have incurred the suspicion of author-craft from the publishers of a periodical work, which from such of the criticisms contained in it, as I have had an opportunity of seeing, seems to be conducted on a plan to merit the encouragement of the public.

I am, SIR,

East-Dereham, Norfolk,

Nov. 10, 1790.

Your obedient humble Servant,

JOHN FENN.

O—P—’s letter shall be noticed in our next.

THE communications of S. and *Ariarachus* have been received.

IN our review of a work entitled *Anecdotes of the Life, Adventures, and Vindication of a Medical Character, &c.* Vol. VII. p. 101. we considered the words “ published for the benefit of the tin-miners of Cornwall” as not serious. A friend of the author of the work has since, in two letters, assured us that the profits of the work are really disposed of for the benefit of the miners. Our opinion of the work itself remains exactly as it is to be found in the Review. It was not taken up so hastily as F. G. seems to think; we insert the following passage from his letter, and heartily wish so good an example may be followed by others.

‘ The fact is, that Adair, being a man of independent fortune, in a conference with Sir William Lemon, a worthy representative of the county of Cornwall, told that gentleman that he intended to apply the profits of his future publications to their benefit, and has not only done so faithfully, but immediately advanced 20l. to relieve their most urgent necessities.’

LITE-

LITERARY INTELLIGENCE.

HISTORY OF ACADEMIES.

FRENCH ACADEMY.

ART. I. Aug. 25. Of the prizes to be distributed this year, one only was awarded. It was for an eulogy of Vauban: the successful candidate was Mr. Noël, one of the professors at the college of Louis-le-Grand. Those for the *eulogy of Rousseau*, and *an historical discourse on the character and politics of Louis XI.* are continued. An addition of 600l. has been made to the former by an anonymous hand, so that the prize for it will be 1200l. [50l.] : that for the latter will be the same. A prize of 2400l. [100l.] will be given to the author of the best essay on *the influence of the discovery of America on the manners, politics, and commerce of Europe.* The subject proposed for the prize of eloquence next year is *an eulogy of Benjamin Franklin*: for the prize of poetry both the subject and kind are left to the choice of the author. The competitors for each of these prizes are to send their performances, post-free, to the Sr. Demonville, imprimeur libraire de l'Academie Françoise, rue Christine, aux armes de Dombes, before the first of July, 1791.

The academy was about to divide between the two Potels, father and son, [see our Rev. Vol. V. p. 211] the prize of virtue, which either of them would willingly have relinquished to the other, but the queen decided the point by doubling the sum, so that each obtained the merited reward. A prize of the same value was also delivered to M. A. Tellier [ib.] in the name of Mr. de Penthièvre. The prize of encouragement was a second time bestowed on Mr. de Saint-Ange; and that of utility, on Mr. de Pastoret, for his work on penal laws; [of this we hope soon to give an account].

ART. II. ROYAL ACADEMY OF SCIENCES, INSCRIPTIONS, AND BELLES LETTRES, AT TOULOUSE.

On the subject of pottery [see our Rev. Vol. V. p. 497] one essay alone merited attention. It was accompanied with several specimens of vessels far superior to any before made near Toulouse, and glazed without the aid of any metallic substance. Not being quite satisfactory, however, it is proposed anew for the year 1793, with a triple prize: 1500 l. [62l. 10s.] [For the prizes for 1791 and 1792, see as above].

ART. III. ROYAL SOCIETY OF SCIENCES AND ARTS, LATE THE PHILADELPHIAN SOCIETY, AT CAPE FRANÇOIS.

The prize subjects proposed by this society for 1791 are: 1. *Can the soil of St. Domingo furnish the medicines necessary to cure the diseases of that country?*

2. *How many kinds of itch are there? Is the insect itch of Africa and America the same as that which has been observed in Europe? What are the distinguishing marks of the several kinds of itch, and their proper mode of treatment?*

For 1792. 1. *An account of the different people of Africa, their form of government, manners, customs, climate, mode of living, and diseases, with the regimen that best agrees with them when transported to the colonies, and the kind of labour for which they have been observed to be best calculated.*

2. *What are the remote and proximate causes, nature, and best mode of treating the ardent malignant fever of the West Indies? It is required to ascertain the difference between this fever, the true malignant fever, the yellow fever, and the disease of Siam, and whether it be contagious.*

3. *What is the mode of action of cantharides? What are their effects on the fluids, on the organs, and particularly on the nerves? in what diseases, particularly in what kinds of fever may their application be useful? what are the symptoms that indicate it? what favourable or unfavourable signs may they furnish? and are there not fevers in which blisters may be useful, and others in which they are dangerous?*

ART. IV. PHILOSOPHICAL SOCIETY AT HAARLEM.

May 21. The following question was proposed for Nov. 1, 1791. As it is clear, that the wheel of a water-mill enters less deep into the water the swifter it revolves, and thus the resistance diminishes as the moving power increases, and *vice versa*; *How may water-mills be constructed, so that the wheel shall always enter equally deep into the water, whether it revolve swiftly or slowly? Further, in what way may the resistance of a wind-mill be diminished in proportion as the force of the wind decreases?*

For Nov. 1, 1792. *What do the late discoveries in chemistry teach us concerning the nature of fermentation, and what advantages may thence be derived to manufactures in which fermentative substances are employed?*

There also remain to be answered before Nov. 1, 1791: 1. *How far may a well-founded theory of the nature of fire, and the cause of heat, be deduced from properly substantiated and decisive experiments hitherto made? and what may be considered as still undetermined on the subject?* The competitors are expected to repeat the experiments of others which they cite, if they have not been sufficiently confirmed by reiterated trials.

2. *Can the utility, and consequently the necessity, of the Rhynland counter-dyke, in case of inundation, be demonstrated a priori, or by unquestionable experience?*

3. *What subjects of the mineral kingdom are there in the United Provinces, from farther inquiries into which advantages to the country may be reasonably expected? The grounds of such expectations must not be omitted.*

Before Nov. 1, 1792. 4. *What is the best method of giving the youth of Batavia an education most proper for improving their minds, teaching them the arts and sciences, and inspiring them with just sentiments of morality?*

Before June 1, 1793. 5. *Can it be demonstrated on satisfactory grounds, from observations made in hospitals, bills of mortality, or other proofs, that the number of diseases and deaths amongst the inhabitants of Batavia, and particularly those who are recently arrived from Europe, is really greater than formerly? if so, at what time did this augmentation commence? how has it increased from time to time? what are the principal causes of it? and can it be proved to be highly probable, from the nature*

of the diseases, a comparison with other places, both in Europe and the East Indies, and more especially from an historical description of the topography of Batavia, that diseases (besides many other inconveniences) are become more frequent in that city, formerly celebrated for being the most salubrious in the East Indies, in proportion as its canals, which were heretofore filled with water, are become at certain periods of the year less deep, and even dry, exhaling fetid vapours throughout the whole city, so that this change may be deemed the chief cause of its greater unhealthiness? Finally, what means may be employed with success to correct this fault, and prevent its troublesome consequences?

Before Nov. 1, 1793. 6. As it is certain, that the quantity of astronomical refractions varies according to the different heights of the barometer and thermometer, the society requires: *A theory of astronomical refractions, by which they may be determined with precision for any given height of the barometer and thermometer, at any given altitude of the star above the horizon.* The society adds, that the theory must be deduced from accurate astronomical observations, or at least verified by such: asks whether the variations of refraction may not be considerably influenced by the humidity of the atmosphere: and thinks it proper to remind the competitors of the formula of Mr. de la Grange (*Nouv. Mémoires de l'Acad. de Berlin, pour 1772, p. 259*) and prof. Damen's reflections on the subject (*Diff. de Montium Altitudine Barom. metiend. Hagæ Com. 1783. in Additam.*)

Before Nov. 1, 1795. 7. *What is the method at present pursued by the Indians and Chinese in the treatment of internal and external diseases? and what natural productions of the country do they employ in treating them?*

The following are for an indeterminate time. 8. *As the purity of the atmosphere has so much influence on the health, and as it is impossible to breathe a pure air at Batavia, because the water of the river, into which a prodigious quantity of ordure is thrown daily, stagnates, or flows too slowly; what is the best method of increasing the rapidity of the current, so as to wash away the filth, and render the air of Batavia more pure and healthy?*

9. *What may we think of the gradation which many philosophers, ancient and modern, have admitted between natural beings? and how far may we be assured of such gradation, and of the order observed in it by nature?*

10. *An account of the inequalities of the motion of the satellites of Jupiter.* The society does not require a mere theory, deduced from the law of attraction, but rather, and indeed principally, applications of the theory to observations, and comparisons of it with them, so that the exactitude of the theory may be judged from its agreeing more or less with observations. The chief aim of the society is to procure more accurate tables of the movement of the satellites than we have hitherto had, whether those tables be constructed solely on the theory of attraction, or, if that be insufficient alone, by employing at the same time empirical equations deduced from observations. As the observations of the third and fourth satellites are less frequent and less exact than those of the two others, the society will be contented with a satisfactory answer relating chiefly to the first and second, the observations of which are most important to navigation and geography.

[See also our Rev. Vol. III. p. 114, and 595.]

The papers, written in Dutch, French, or Latin, are to be sent post-free to Mr. C. C. H. Vander Aa, secretary to the society. The prizes for questions 5, 7, and 10, are double.

ART. V. SOCIETY FOR DEFENDING THE CHRISTIAN RELIGION AGAINST ITS MODERN OPPOSERS, AT THE HAGUE.

July 1. The prize for an answer to the society's fourth question, [see our Rev. Vol. I. p. 227] was adjudged to Mr. Mich. Pap Szathmari, a noble of Hungarian Transilvania, prof. of theology and history in the college of Clausenburg. Prizes of 50 duc. [23l. 12s.] each, were obtained by Mr. Engelsman, J. Mebius, Mr. Ja. Heringa, and Mr. Cornelius Schwaving, for answers to different questions: and the silver medal by Mr. Mat. Bannebacker, of Delft, for a treatise on the influence of faith in the revealed doctrines of salvation.

The following question not having been answered satisfactorily, it is repeated, and answers will be received till Sept. 1, 1792. *As the present opponents of the christian religion endeavour to render their sentiments more pleasing, by pretending, that their aim is to restore the doctrines of Jesus to their original purity, and free them from all human additions, it is required, to give a clear and complete account of the doctrines of Christ and the apostles, deduced from a comparison of their own precepts, as delivered in the New Testament.*

Against Sept. 1, 1791, are proposed the following new subjects.

1. *A concise defence of the authenticity of the books of the Old Testament, about which there have been in our days many disputes.*

2. *A similar defence of the authenticity of the books of the New Testament.*

3. *The best means of instilling into christian youth distinct and grounded ideas of the revealed faith, and morality, so that they may be strengthened and secured against the seductions and errors of the present century, at an early age.*

4. *An exposition of the best means of making the common people sensible of the importance of religion, and promoting their entertaining just ideas of it.*

5. *A satisfactory essay on some principal doctrine of christianity, disputed by those who style themselves modern improvers.*

6. *A solid refutation of some error at present inculcated by such.*

7. *A critical explanation and defence of one or more argumentative passages of the Old or New Testament, known by the name of loca claviga.*

8. *A sufficient, cool, and forcible criticism of any new work, falsifying the truth, or deriding religion.*

9. *A complete explanation of some theological position.*

The prize for each of the first four is the gold medal, or 50 duc. [23l. 12s.] and for each of the other five, the silver medal, or 10 duc. [4l. 14s. 6d.]. The gold medal will be given also to the best paper on the following subject, sent before Jan. 1, 1792.

10. *A proof of the true and eternal divinity of the Lord Jesus Christ, more especially calculated to give the principal arguments in their full force, so that they may be employed against the subterfuges and scruples of modern opposers of it.*

THEOLOGY.

ART. VI. London. We hear the Rev. G. Watson, A. M. formerly fellow of Trin. Coll. Cambridge, proposes publishing an English Harmony of the Gospels, from the Greek of bishop Newcome: with illustrations of the evidences, doctrines, manners, and language, annexed in the order of the history.

The illustrations, added in the present work, are collected, and occasionally abridged, from the most valuable writings of the English clergy, and from some of the most considerable foreign critics. The tendency of these illustrations is sufficiently expressed in the title above; in the arrangement of them, care has been taken, to render them equally acceptable to the private christian, and the student in divinity. It is to be published by subscription, in three vols. 8vo. price 18s. and subscriptions will be received by Cadell, London; T. and J. Merrill, Cambridge; R. Christopher, Stockton, &c.

ART. VII. Erlangen. *Nova Verio Graeca Pentateuchi, &c.* A New Greek Version of the Pentateuch, now first published from the Manuscript in St. Mark's Library at Venice, and revised, by Chr. Fred. Ammon, Phil. D. &c. Part I. containing Genesis and Exodus, with an Epistle to J. B. C. d'Ansse de Villoison. 8vo. 353 p. 1790.

This publication is to consist of three volumes, to the last of which prof. A. will subjoin his remarks. Mr. A. has taken the liberty of correcting some trifling errata in the manuscript, which we could wish he had not done: we hope, however, that he will not omit to tell us what alterations he makes.

Jen. Allg. Lit. Zeit.

ART. VIII. Lemgo. *Die Bibel Alten und Neuen Testaments, &c.* The Books of the Old and New Testament, with copious explanatory Remarks: by W. Fred. Hezel. Vol. IX. containing the Acts of the Apostles, and Paul's Epistles to the Romans and Corinthians. 8vo. 598 p. 1790.

This volume abounds more with remarks of Mr. H.'s own than either of the preceding ones. They lead us highly to esteem the author as an upright teacher of religion, particularly when he throws off the fetters of the schools, and speaks his sentiments with a noble freedom. The tenth and last volume was promised to appear at Michaelmas.

Jen. Allg. Lit. Zeit.

JURISPRUDENCE.

ART. IX. Paris. *Théorie des Loix criminelles, &c.* Theory of Criminal Laws, or a Discourse on the Question: Does the extreme Severity of the Laws diminish the Number and Enormity of Crimes? followed by an Analysis of the criminal Laws of different People: composed in 1788, and published in 1789, by P. J. B. Chaussard, Councillor at Law, &c. 8vo. 208 p.

In this animated discourse, the author examines the annals of various countries, and shows, that where severity of punishment has been adopted, crimes have been most prevalent; and that the mildest systems of legislation have always proved in practice most favourable to

virtue. The greater part of his principles appear to have been adopted by the committee of legislation, and sanctioned by the decrees of the National Assembly of October 8 and 9, 1789.

Mr. de Vozelle. Journ. des Savans.

ART. x. *Code politique de la France, &c.* The political Code of France, or a Collection of the Decrees of the National Assembly. 2 vols. 16mo. about 400 p. each. Printed for Nyon, Rue du Jardinier, and Ballard, Rue des Mathurins. 1790.

We are thus particular in giving the names of the publishers of this collection, as we are told by Mr. de Vozelle, in the *Journ. des Savans*, that of several which have appeared, this is the only complete and authentic one, and that it is compiled by a member of the National Assembly, who he has reason to believe is a man particularly qualified for the task.

M E D I C I N E.

ART. xi. *Paris.* The month of March was cold and dry, particularly during the first fortnight, when northerly winds prevailed. The mornings were sometimes frosty, whence vegetation was languid.

This constitution kept up diseases depending on obstructed perspiration, as catarrhs, rheumatisms, complaints of the throat and eyes, colics, and serous diarrhoeas. Most had an inflammatory diathesis, and required bleeding at the beginning. Malignant or serous fevers were in less number, and though alarming symptoms appeared at the attack, they were not very fatal. Simple bilious fevers were more or less inflammatory, and frequently accompanied with symptomatic eruptions: they required repeated bleeding, both in the beginning and during their progress, the judicious employment of which alone enabled diluents to be administered in sufficient quantity to bring on a crisis, which was in general tedious and difficult, on account of the irritability, which was so great, that the lightest liquid prodigiously fatigued the patient, and brought on a repugnance for it. Bleedings facilitated the use of liquids, by diminishing the tone of the fibres; and those made by the application of leeches to the verge of the anus, were particularly beneficial in the state of the disease. At this period blisters only produced eschars, and augmented the symptoms. Peripneumony was very common, generally becoming putrid in the old, weak, or cacoehymic. It was the more fatal from exhibiting at first the symptoms of common catarrh only, whence bleeding was neglected, and diluents alone employed; but about the third day, the symptoms of peripneumony appeared in all their violence. Small bleedings, at this period, though the blood was very buffy (*très-fluxionnaire*), did not mitigate the symptoms, which continued to increase, though much bile was discharged, till about the sixth or seventh day, when the patient died, complaining of a burning heat in the thorax. Small-pox continued to occur, but was mild. Intermittents, which had appeared to have ceased, became common, preserving the vernal type. The gout was frequent, but more regular than in the preceding month. Apoplexies were common, and in general fanguineous and arthritic.

Journal de Médecine.

ART.

ART. XII. *Epidémie observée au Village de Pont-à-Rache, &c.* Account of an Epidemic Disease observed at Pont-à-Rache, near Douay, in the Autumn of 1789: by Mr. Taraget, M. D. &c. 4to. 28 p. 1790.

This is a good description of an epidemic, preceded by some general remarks on epidemic diseases. *Mr. Lallemant. Journ. de Méd.*

ART. XIII. *Tubingen. Geschichte der Rubr, und des Faulfiebers, &c.* History of a Dysentery, and putrid Fever, which prevailed in the Neighbourhood of the Main, and of a Disease which was epidemic in Suabia: by J. A. Weber. 8vo. 176 p. 1789.

This makes an addition to the number of valuable works on epidemics. The disease which prevailed in Suabia was a bilious catarrhal fever. *Mr. Grunwald. Journ. de Méd.*

ART. XIV. *Brunswic. Bemerkungen und Beobachtungen über die Pocken, &c.* Remarks and Observations on the epidemic Small-pox of 1787: by G. F. Hildebrandt, M. D. Prof. of Anatomy, &c. 8vo. 224 p. 1788.

The small-pox occasioned great ravages at Brunswick in 1787, and these observations make an useful addition to the history of that disease. *Mr. Grunwald. Journ. de Méd.*

ART. XV. *Gottingen. Dissertatio medica, Momenta quædam de Efficacia Infectionis Variolarum in curandis nonnullis Morbis chronicis exhibens, &c.* An Essay on the Efficacy of Inoculation in curing some chronic Diseases: by Christ. Vogelsang, M. D. &c. 8vo. 51 p. 1788.

Amongst the diseases to which inoculation frequently puts a stop, Dr. V. reckons intermittent fevers, cutaneous and venereal diseases, rickets, scurvy, scrophula, spina bifida, and worms.

Journ. de Médecine.

ART. XVI. *Leipsic. Bemerkungen über die natürlichen und künstlichen Blattern, &c.* Remarks on the natural and inoculated Small-pox at Weimar, in the Year 1788: by Christ. W. Hufeland, Physician to the Duke of Weimar. 8vo. 200 p. 1789.

This work is divided into three chapters. The first gives a history of the disease, the general state of the health, and variations of the atmosphere during the epidemic. Of 650 children attacked with the small-pox, 50 died: 18 boys, and 32 girls.

The second contains the description and treatment of the inoculated small-pox. Dr. H. prepared his patients by the use of the warm-bath, mercurials, and vermifuges; and children of delicate constitutions, by the infusion of bark, open air, and a good regimen. To one, who would not submit to the lancet, he gave the disease by rubbing some of the variolous matter on the skin. About the middle of May a catarrhal fever appeared. Inoculation then produced only the external marks of infection, which vanished when the catarrhal fever took place. Its symptoms were copious fetid sweats, and sometimes diarrhoea. The patients generally got well in about a week, but were not secured from fresh infection. In those who had the variolous eruption it went on slowly and irregularly, so that it was necessary to assist

assist it with medicines, as it was the suppuration: the pustules nevertheless were watery, and whatever precautions were taken, abscesses, or other accidents usually consequent to natural small-pox, followed. Dr. H. inoculated children indiscriminately from the age of six weeks to that of twelve years, and thinks the first four months the most favourable period. Worms, dentition, atrophy, and scrophula, he found to have an unsavourable influence on inoculation; and obstructions of the mesenteric glands frequently to occasion abscesses in the bones. He is also persuaded, that carrying the cool regimen too far, produces an abortive small-pox, not securing from subsequent infection.

The third contains the description and treatment of the natural small-pox. In this, flowers of zinc, opium, and mercurials, were administered with striking success. At the period of the eruption, the flowers of zinc were almost a specific, acting as sedative and antispasmodic: they determined the disease to the skin, remedied the accidents occasioned by worms, and kept the body open. To children from one year old to three, two grains were given every two hours; from three to six, three grains; and from six to ten, four grains. If they had worms, mercurials were added. During the period of suppuration also they were extremely useful, joined with the bark. In the most dangerous state of the disease, when the patients were covered with confluent pustules, funk, empty, and black; when the tumefaction of the face was gone down, and the extremities were not swollen; when the pustules dried, or became of a chalky whiteness, without previous suppuration; when there was an insensibility to pain; when the respiration was difficult, the voice hoarse, the limbs trembling and helpless, the stools abundant, colliquative, and fetid, and the agitation of mind extreme; when the best cordials and antiseptics, and even emetics were without success; opium produced the happiest effects. It operated a change in a few hours, and it was seldom necessary to continue it above three days. Very small doses were sufficient: for to children from one year to five, never more than one drop of liquid iaudanum was given, mixed with two grains of flowers of zinc: to those above that age, two drops were given. This dose was repeated every two hours, joining with it such other medicines as circumstances required. To five children, in whom the mesenteric glands were obstructed, and who were covered with a malignant pock, in which even opium did not produce a laudable suppuration, Dr. H. administered mercurials, ordering a small quantity of ointment of quicksilver to be rubbed into the inside of the thighs and axilla, with manifest advantage. Children who took a mercurial once a week, and persevered in this course till they caught the small-pox, always had the disease favourably.

Mr. Grunwald. Journ. de Méd.

C H E M I S T R Y.

ART. XVII. *Extrait d'Une Lettre de M. Crell, à J. C. de la Metberie; Règules métalliques retirés de la Terre calcaire, &c.* Extract of a Letter from Mr. Crell to Mr. de la M. metallic Reguli extracted from calcareous Earth, Magnesia, siliceous Earth, and sedative Salt, by Mr. von Ruprecht. *Journal de Physique.*

" I had already acquainted you of Mr. von Ruprecht's having metallised heavy earth [see our Rev. p. 230, of this vol.]: but he has

since

since carried his discoveries still farther. He has metallised the magnesian earth, obtained from well crystallised vitriolated magnesia. The regulus was thoroughly fused, its colour bright like steel, and not acted on by the magnet. Its grain when broken is fine and compact: rubbed on a stone it is of the colour of platina. I have received a small regulus of the heavy earth, and another of the magnesia: they are decidedly metallic, and well fused. Mr. von R. has also metallised calcareous earth obtained from limewater. The regulus is attracted by the magnet. Siliceous earth likewise (purified with aqua regia, and perfectly white and soft) has afforded a regulus, capable of being attracted (this experiment, however, has not yet been repeated). Mr. von R. has also reduced the salt of platina, without any addition, and has obtained a perfect regulus not attracted by the magnet. A perfect regulus of manganese is not capable of being attracted by the magnet: of the reguli of heavy earth, some are, others are not. The reguli obtained from calcareous earth are very brilliant: rubbed on a stone, they are even whiter than those of magnesia. The latter, when fractured, are partly lamellated, partly striated: their lamellæ and grains are irregular: they are pretty hard (even harder than those of tungsten and molybdæna, of which I have also received beautiful reguli): rubbed on a stone, they are of a greyish white colour, approaching that of platina: their specific gravity is 7,380. The reguli of calcareous earth break with a fine compact grain, of a brilliant steel white: they are brittle, and those parts which have been exposed to the open air and fire are attracted by the magnet, whilst those which were at the bottom of the crucible, or covered with a vitrified matter, are not: (just as it happens with the reguli of platina). A portion of sedative salt also was in one instance reduced to a regulus by Mr. von R.—I am eager to impart to you these extracts of two letters, as I am persuaded, that they will interest you extremely, since they give us a glimpse of an extraordinary revolution in chemistry."

To this article we shall subjoin an abstract of a letter from Mr. Klaproth, of Berlin, in the *Allgemeine Literatur-Zeitung* of Jena, dated October 26.

Mr. K. has repeatedly made a series of experiments with heavy earth, with a particular view to ascertain the point of its metallic nature, and is convinced by their results, that it is not metallic. He is now going through new series of experiments with respect to the other earths. In the mean time he has received a letter from Mr. Salvaresi, head of the six Neapolitan pensioners residing at Schemnitz, where these earths were supposed to be converted into metals, for the study of mining. The reguli obtained by Mr. Ruprecht and Mr. Tondi, Mr. S. supposes to be merely iron, which is capable of assuming different appearances by the help of coal, or some peculiar metal greatly alloyed with iron. Almost all the reguli were attracted by the magnet; they all greatly resembled each other; and whatever was put into the crucible was converted into metal. Mr. S. suspects, that the reguli proceeded chiefly from the coal, by means of which alone the earths were reducible: and, on subjecting pure coal to an examination, in exactly the same apparatus, the same circumstances, and the same method, in which the earths were reduced, he obtained several reguli, agreeing in form, colour, and external qualities with those in the inner part of the crucible.

crucible, those excepted which appeared externally above the vitrified mass. Mr. S.'s experiments with the coal were performed in the presence of several.

NATURAL KNOWLEDGE.

ART. XVIII. *Lettre de M. de Luc, &c.* Letter from Mr. de Luc on the Relations between Light and Fire. *Journ. de Physique.*

The first idea, says Mr. de L. which gave me hope of the relations between light and heat being discovered was, that the rays of the sun are only luminous and not calorific out of our atmosphere. This idea I derived from the known phenomenon, that there is more light, yet less heat, on the tops of mountains, than in plains. On examining the various phenomena of heat, it appears, that a part of the light which arrives at our globe disappears from our eyes: it grows weaker from stratum to stratum of the atmosphere, and when it reaches the ground it is in great part absorbed by almost all bodies. The most sensible consequence of this diminution of the solar rays is an increase of heat. That the rays of the sun are not fire, or a vehicle of fire, or a cause of heat, whilst they are simple, is clear, for they have no effect on the thermometer of mercury, if the ball be isolated, and perfectly clean. In many solid substances, however, which do not reflect them, they produce heat; and this different in degree in different substances. The striking difference of the effect of the sun's rays in producing heat at different heights of the atmosphere, would no doubt long ago have united all philosophers in the opinion, that they are not calorific of themselves, but for the vague notion, that this difference proceeded from the earth. But if the inferior air received from the earth the quantity of heat which produced this difference, the greatest variations of heat, both annual and diurnal, ought to occur in the superior strata; for they would experience the alternations of the presence and absence of the supposed immediate cause of heat without any sensible compensation, whilst its absence would be sensibly supplied to the inferior ones by their communication with the earth. Were the rays of the sun the immediate cause of heat in the atmosphere, it would be impossible that there should be any difference of temperature betwixt its superior and inferior strata, or that either should retain any heat in the sun's absence. An experiment of Mr. de Saussure is much to the purpose: on exposing a thermometer to the sun in a box, one side of which was of glass, and the others of blacked cork, he found the mercury rise considerably, and more on the top of a mountain than in the plain. In this case, the light, instead of being reflected from the box in its natural state, was combined with some other substance, and thus produced heat. This is the modification which light undergoes when it becomes calorific: it unites to another substance, which deprives it of its distinguishing properties, and imparts to it others, namely those of fire. Light then appears to be the deferent fluid of fire, as fire is of aqueous vapour. If aqueous vapour be compressed in a vessel, a part of it is decomposed, and the fire, its deferent fluid, escapes: if a small bar of iron, made very hot, but not luminous, be forged rapidly, the fire, not having time to escape, will be strongly compressed, and at length give out light.

Thus

Thus many of the relations betwixt light and heat, hitherto undetermined, and still less explained, become explicable. We see the reason of the constant difference of heat in the superior and inferior strata of the atmosphere; and the great inequality of heat in the same places at the same season, and in different places under the same latitude. We perceive, that it is not enough for the rays of the sun to have the same density, and the same time of action in the air, to produce the same degrees of heat: for they must also find the same quantity of the matter of fire, or the same disposition of that substance to unite with them. Thus too the solar rays produce different degrees of heat in different bodies exposed to them the same length of time, because those bodies contain the matter of fire in greater or less quantity, or in combinations more or less easily destroyed by them: and thus the calorific fluid issuing from those bodies to communicate itself to others does not escape under the form of light, though light was the external cause of their being at first heated, because that fluid is no longer simple light, but light combined with another substance, which has altered its properties.

There is another phenomenon of heat, which has not been explained: its rapid diminution in fine days, after the setting of the sun. The fire, which I shall henceforward consider as the sole calorific fluid, does not retire into bodies more dense than the air; for they also cool, though more slowly: it does not combine more abundantly with the water disseminated through the air; for the humidity of the air increases: evaporation, which appears to render the stratum of air next the earth comparatively cool, is more copious during the day: of the combinations of fire with other substances, we know none which is promoted by the absence of the sun: nor can we suppose, that the fire abandons our globe; for then it must traverse the superior strata of the atmosphere by day as well as by night, which would prevent our finding the difference of temperature observed between the superior and inferior strata. The solution of this phenomenon depends on another property of light in the production of heat, which I first infer from analogy to some phenomena of electricity. In the preceding letter I showed, that a given mass of electric fluid acquires more expansive force when it receives an additional quantity of deferent fluid. Mr. de Saussure has observed of the electricity of the atmosphere, that it increases from the rising of the sun to a certain part of the day, and then diminishes. Hence from analogy I attribute to light, the deferent fluid of fire, the power of increasing the expansive force of the latter. This explains the sudden augmentation of heat by the solar rays.

Thus then I shall offer my theory of terrestrial heat under one point of view. Our globe has a provision of fire, the origin of which I shall explain in a subsequent letter; but I consider it here as spread throughout the whole of the globe, so that it exercises the same degree of expansive force in every place where no chemical process occurs to disengage or absorb it. Observation shows, that the same degree of heat prevails in all subterranean cavities, except in some parts of mines, where we have reason to suspect chemical operations. As to the parts of the globe nearer the surface, their fire passes into the air, when that which it contains has a less expansive force, and *vice versa*, which maintains a certain equilibrium of heat at that surface,

but

but with vicissitudes to which I shall proceed. The rays of the sun, considered with respect to heat, exercise two distinct functions on our globe; that of forming fire, and that of augmenting its expansive force when formed. On the other hand, fire is incessantly combining with other substances, both in the atmosphere, and on the surface of the globe; which combinations are destroyed under other circumstances: and hence result a great part of terrestrial phenomena. In these combinations and disengagements of fire, it is frequently decomposed itself: that is the matter of fire alone participates in those operations, and the light escapes, in some instances perceptibly, in others imperceptibly; and, if it do not instantly enter into some new combination, it quits the earth. One of the actions of the solar rays is to repair these losses of fire. But the operations of nature on our globe are also connected with alterations of increase and decrease of heat in the day, more sudden than those resulting from the abovementioned causes: these are produced by the expansive power of the solar rays, which cease during the night. The annual vicissitudes of heat arise from the same causes, only acting with more intensity. In fine, these variations of heat do not follow the intensity of the sun's rays, because the action of the latter depends essentially on the circumstances in which they find the matter of fire.

NATURAL HISTORY.

ART. xix. *Hanover.* On the third of January next, and following days, will be sold here, by auction, an excellent collection of shells and minerals, consisting of 6000 pieces. Catalogues, containing seventeen sheets, may be had of *Burgermeister Albert.*

Jen. Allg. Lit. Zeit.

ASTRONOMY.

ART. xx. *Windfor.* Mr. Herschel having perceived a brilliant point in Saturn's ring, took it at first for an eighth satellite; but he afterwards found, that it belonged to the ring itself, and, on examining it attentively, discovered, that the ring has a rotatory motion, the period of which is ten hours, $32' 15.4''$. This curious observation affords a very satisfactory confirmation of the theory by which Mr. de la Place had determined the forces necessary to preserve the ring at the distance at which it is: for he had concluded, in the Memoirs of 1787, p. 263, that the time of the rotation of the interior part of the ring must be about ten hours. Mr. de la P. supposes, as geometricians have done in their inquiries into the figures of the stars, that an infinitely thin stratum of fluid spread over the surface of the ring, would remain there in equilibrium, by means of the powers by which it would be animated. This hypothesis is the only one admissible. It appears to him contrary to all probability to suppose, that the ring is supported round Saturn by the attraction of cohesion only; for in that case, the parts next the planet being always acted on by the continually renewed attraction of gravitation, it would be gradually destroyed, as are all the works of nature, which have not sufficient powers to resist the action of external causes. By the conditions of the equilibrium of this fluid the figure of the ring must be determined; and by those too Mr. de la P. found the rotation of ten hours: but he supposes, that

that there are many concentric rings; and indeed a black line has already been perceived, which seems to indicate it.

Journal des Savans.

ART. XXI. *Verona.* Mr. Cagnoli, one of the most scrupulous and exact astronomers we know, who constructed an observatory at Paris in 1782, where he took some excellent observations, which he has continued at Verona, has found the latitude of this city to be $45^{\circ} 26' 7''$, its distance from the meridian of Paris $34^{\circ} 42''$, the degrees of refraction $\frac{1}{25}$ less than at Paris, the altitude of the pole at the royal observatory of the latter city $48^{\circ} 50' 14''$, and the mean obliquity of the ecliptic in 1790, $23^{\circ} 27' 55,8''$, which is $2''$ less than that assumed by Mr. de la Lande, and $3''$ less than that given in the Nautical Almanac of London.

Journal des Savans.

AGRICULTURE.

ART. XXII. *Pickering, Nov. 1.* Mr. Marshall (well known for his unremitting pursuit of agricultural knowledge) having extended his survey of provincial practice so far as to enable him to go through his intended review of books on rural subjects, and being desirous of rendering complete a selection of their useful ideas, more particularly of saving from oblivion whatever may be worth preserving of the early writers, solicits the favour of gentlemen who are in possession of literary productions, written professedly on the rural economy of Great Britain, or of works containing natural or scientific knowledge immediately relating to agriculture, planting, or the management of landed estates in this island, and published prior to the present century, to oblige him with catalogues of them, noting the size, edition, and date, addressed to Mr. Nicol, bookseller to his majesty, Pall-Mall. And in order to render his survey the more complete, he solicits a temporary residence, on a landed estate, in a district the practice of which yet remains unregistered.

POLITICAL OECONOMY.

ART. XXIII. *Paris. Mémoire sur les Clafes de la Marine, &c.* Mémoire on the Registering of Seamen, read at the Marine Committee of the National Assembly, Feb. 11, 1790: by Mr. Poujet, Superintendant-general of the Registers. 8vo. 101 p.

The necessity of seamen to man a fleet in time of war being obvious, Mr. P. considers the only three modes in which it can be effected: entering voluntarily, pressing, and registering, so that all may serve in rotation. The latter he deems far the best, and examines how it may be conducted most advantageously to the state, and least oppressively to the seaman.

Abbé Tessier. Journ. des Savans.

ART. XXIV. *De l'Inde, &c.* On India, or Thoughts on the Means which France ought to employ with Respect to its Possessions in Asia. 8vo. 140 p. 1790.

The subject of this work is a question of the utmost political importance to France: its author appears, from a note, to have an employment in some department of government, and has certainly studied thoroughly the interests of France in Asia, the designs and powers of the native princes there, and the strength and resources of the English, less

less powerful than the French in America, their rivals in Europe, and superiors in the East. The grand point to be discussed is, where the French ought to fix their chief establishment. Pondicherry and the Isle of France are the sole places that have any pretensions; and of these the author endeavours to show that the latter would be far most advantageous. Pondicherry is too much exposed to the attacks of the English: nor is an establishment on the peninsula of India necessary to the French, if they avail themselves of the politics of the different governments there. These our author examines, with the different degrees of strength of each power, and advises, that France be not desirous of territorial acquisitions. "How should the princes of India," says he, "interest themselves in our success, if we drive out the English only to put ourselves in their place? The true conquerors of that wealthy part of the world will be they, who, having taken from their rivals the dominions they have usurped, shall restore them to the princes who ought to possess them, under no conditions but that of stipulating a trade in their favour."

Abbé Tessier. *Journ. des Savans.*

ART. XXV. *Lettres patriotiques d'un Curé, &c.* Patriotic Letters from a Clergyman, Member of the National Assembly, to a late provincial Intendant, on the Regeneration of the Country. Part I. 1790.

"The object of this work," says the author, "is to direct public patriotism to the inhabitants of the country; to show their extreme misery; the kind of tax which would be least burdensome to them; the claim they have to the benefits and indulgence of their country; the good that might be done them by the rich, and the happiness these would reap from it; the interest which both ought to take in the return of peace and order; the intimate connexion of these with morals, so closely allied to religion; the necessity of confirming the one, and reforming the other, by a wise education, properly suited to those who are to obey, and to those who are to command." The author's picture of profusion, mistaken for generosity, is extremely well drawn; and the execution of the whole is such, that we must eagerly wish a continuance of these letters.

Journal Encyclopédique.

CLASSICAL LITERATURE.

ART. XXVI. *Genova.* Ab. Vella writes, that he shall shortly publish the 60th book of Livy, from an Arabian manuscript.

Jen. Allg. Lit. Zeit.

ART. XXVII. *Eutin & Hamburg.* Mr. J. H. Voss, the celebrated translator of the *Odysssey*, has published a translation of Virgil's *Georgics* into German hexameter verse, with notes. The German reviewers speak highly of the merit of the performance, as preserving the spirit of the original, and most frequently even the rhythm of the verse. We intend to give a review of the work as soon as we can procure it.

ART. XXVIII. *Wotton Underwood, near Olney, Bucks.* It is with much pleasure we can inform the public, that Mr. Cowper, well known by his two volumes of poems, which have gone through several editions, has, after five years close application, completed his translation,

tion, into blank verse, of the *Iliad* and *Odyssey* of Homer, and that it is now in the press, and expected to be published in April next. This work is printing by subscription, in two large volumes in quarto, price two guineas the common paper, and three guineas the fine paper. Those who wish to encourage it, are desired to send in their names before the first of April, to Mr. Johnson, in St. Paul's Church Yard. The proposals inform us, that when the subscription is closed, the price will be raised. We have seen a list of the subscribers, which, as might be supposed, is a very respectable one.

ANTIQUITIES.

ART. XXIX. Gottingen. *Die Parische Chronik, &c.* The Parian Chronicle, with a Translation and Explanation, and Remarks on its Authenticity, from the English: by R. F. Christ. Wagner. 8vo. 183 p. Pr. 12 g. [1s. 9d.] 1790.

After the original, and the Latin version of Dr. Chandier, follows a German translation with remarks. To these are added, strictures on its authenticity, from the *Parian Chronicle*, and answers to those strictures, chiefly from Hewlett, and the Gottingen reviewers.

Jen. Allg. Lit. Zeit.

ART. XXX. Leipzic. *Ueber den Ursprung der Pyramiden, &c.* On the Origin of the Pyramids of Egypt, and of the Ruins of Persepolis: a new Essay by S. Sim. Witte. 8vo. 190 p. Price 16 g. [2s. 4d.] 1789.

Mr. W. supposes, that the pyramids were not works of art, but the production of volcanoes, and forced up from the bowels of the earth by subterranean fire, during some grand revolution that happened ages past. The same origin he attributes to the colossal palace, or temple of Jupiter, at Girgenti, in Sicily; to the palace of the Incas, on the plain of Latacunga, and that on the north-east of Atuncanjar, in Pers; to the ruins of Persepolis, Balbec, and Palmyra; to Stonehenge in England; and some others. This large field may seem to increase the difficulty of the author's task, but it affords him many arguments in support of his hypothesis, which he could not have found had he confined himself to the antiquities of Egypt. The inscriptions, as they have been deemed, he supposes to be the work of those hell-fish which are known to make perforations into rocks and stones.

However unsatisfactory prof. W.'s arguments may appear to many, they will at least call our attention to these objects, and lead us to examine them in a new point of view; particularly as this essay displays much knowledge, clad in a pleasing garb, and accompanied with modesty and urbanity.

Jen. Allg. Lit. Zeit.

COINS AND MEDALS.

ART. XXXI. Jena. A large collection of gold coins is to be sold here, at a very reasonable price, to any one who will take the whole. Amongst them are several pieces not mentioned in the best catalogues of coins, or treatises on the subjects. Of English coins there are rose and angel nobles of Edw. III. Edw. IV. and Henry VIII. a half sovereign of Edw. VI. a very beautiful whole sovereign of Eliz. on the defeat of the Spanish armada; a unite or laurel of James I. of one pound sterling; a pound sterling of the parliament, 1653; a rare piece

piece of Cromwell, 1656, &c. Any person desirous of becoming a purchaser may apply to the office of the *Allgemeine Literatur-Zeitung*.

Jen. Allg. Lit. Zeit.

HISTOR Y.

ART. XXXII. Naples. *Origine della Popolazione di San Lucio, &c.* Origin of the Population of San Lucio, and its Progress to the present Day, with the Laws made for the good Government of it: by Ferdinand IV. King of the Two Sicilies. 1789.

The king of Naples amused himself in his youth with forming a kind of hermitage in a part of the park of Caserta, to which he might retire for the purpose of enjoying pleasures more tranquil than those of the court. Losing his eldest son at this place in 1776, he discontinued his visits to it; but did not forget the people who had settled around his cottage, and who then amounted to 134. These he formed into a kind of republic, or separate state; giving them a code of laws, and regulations for their way of life, and the education of their children.

In this volume the monarch himself gives an account of what he has done, and his intentions. Nothing could afford him a greater claim to the respect and esteem of mankind, or consequently add more to his glory, than such an instance of his natural wisdom, goodness, and justice, of the sagacity and rectitude of his moral notions, of his love of virtue, and of his universal benevolence.

Journal des Scavans.

MISCELLANIES.

ART. XXXIII. Berlin. *Bruchstücke aus dem Campagne-Leben eines Preussischen Feldprediger, &c.* Fragments of the military Life of a Prussian Army-Chaplain, from Ten Weeks before the Affair of Hochkirchen, in the Night of October 4, 1758, to Christmas of the same Year. 8vo. 112 p. 1790.

These were written by Mr. Küster, of Magdebourg, and published by Mr. Sack, of Berlin. They tend to elucidate the history of that fatal night, and its consequences, and of course of the war itself; and afford an honourable testimony of German courage, fidelity, and generosity. No feeling reader can dismiss the book without emotion: we wish we had more such: of marches and countermarches we have already enough. A serenade in Hochkirchen delayed the attack of the Austrians some hours: but for this probably all had been lost.

Jen. Allg. Lit. Zeit.

ART. XXXIV. Altdorf. Mr. B. F. Hummel, master of the public school, wishes to dispose of his library, consisting of 1100 tracts, great and small, relative to German antiquities. The price he has fixed at 55 louis-d'or [55l.]. They are already mentioned in his *Biblioth. Deutsch. Alterthums*, but any one wishing to purchase them may have a written catalogue.

Jen. Allg. Lit. Zeit.

We have just learnt from the Jena journal, that gen. Washington is about to publish a history of the late war in America. We are rather surprised to have the first intelligence of this from Germany: its authenticity we cannot vouch for, however, as we have not yet heard of it from any other quarter.